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ART. I.—*On the Dynasty of the Sák Kings of Suráshtra.* By
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[Read, April 15, 1848.]

AMONG the many objects of Indian antiquarian research which possess general claims upon the attention of the Royal Asiatic Society, none perhaps can be cited as more peculiarly entitled to its fostering care than the History of the Suráshtran Kings, as illustrated by their Coins. The pages of the Journal of this Society contain the earliest systematic notice of these beautiful medals¹; and though much has been written, and much additional information gained in other places, little or nothing has since been done by our Association to forward this particular enquiry. Having presided over the first introduction of this investigation into the world of literature, it is but fit the Society should watch over its accepted offspring; and if as yet unable to conduct it to a safe and satisfactory resting-place, it may at the least prove useful in advancing it some stages on its way.

The subject itself, at the present moment, is invested with some slight additional interest consequent upon a recent discovery of a considerable number of Suráshtran coins at Junír², which has contributed two

¹ Journ. R. As. Soc., No. XII.

² The Junír *find* (August, 1846) consisted of some four hundred coins, comprising specimens of the mintages of most of the early monarchs of the list at present adopted, the series concluding with those of Viswa, the son of Atri, the twelfth king. Of the entire number of medals thus brought to light, a selection of ten has been forwarded by the Bombay Government to the Court of Directors of the East India Company. These have been unreservedly placed at my disposal for publication. About a moiety of the whole Junír collection, in the possession of Dr. Bird, has been brought to England since the body of the present paper was presented to the Royal Asiatic Society; I am indebted to the owner's kindness for an opportunity of inspecting many of these specimens, and am permitted to cite the extra dates inserted—each duly acknowledged—at the close of the detail of these records, to be found under the description of the obverse surface of the medals of the several kings. As Dr. Bird proposes, at some future period, to

new names to the list of the previously-known Sáh Kings. A review of the entire question is likewise specially called for on other grounds, inasmuch as it yet remains no slight reproach to Indian archæologists that their best authorities differ in respect to the æra to which it is proposed to assign these medals, to the strange extent of many centuries'. Fortunately there is less doubt regarding the locality whence these coins chiefly come, and it is a most important point in the enquiry, freely conceded by all, that Suráshtra—of which the peninsula of Guzerát may be taken as the metropolitan province—is the nidus to which their origin must be traced. It does not often occur in Numismatic investigations that this point is so clearly and unexceptionably made out, and emphasis is laid upon the fact thus early in the present notice, as the singularly local character attaching to these coins affords a sure light amid the somewhat misty atmosphere in which the general subject is enveloped. Other salutary checks are indeed offered to any

give to the world his ideas of the history of the series—for which, indeed, he has for some time past been making preparation—I am the more particular in thus expressing my obligation to him for the amount of courtesy just noticed. To this I have now to add, that, since the foregoing sentence has been in type, I have been favoured by Dr. Bird himself not only with a close verification of the dates to which I at first proposed to limit my quotations, but also with a very full detail of many incidental peculiarities attaching to his collection, which, in my own very cursory examination, fairly escaped observation. Most important among these is to be noted the first recognition of the name of Dámá Sáh (the 3rd king) on his own proper coins, and the information attendant upon the discovery that he also was the son of Rudra Sáh, he having hitherto been known only as being named on the coins of the 5th, 6th, and 7th kings as their common father. To Colonel Sykes I have to tender my thanks for the liberal way in which the whole of his extensive collection of Guzerát coins—chiefly found at Kaira—was made over, to add to the materials already at command, and to test the value of the information previously made patent through the numismatic contributions of Steuart and Prinsep.

It will be seen that the Cabinets of the Royal Asiatic Society and that of my friend Dr. Swiney have each furnished their quota to the general illustrations.

A few valuable coins, part of a hoard of some hundreds found at Kamptí (Nagpúr), for the communication of which I am indebted to Lieut.-Colonel Wynch, Madras Artillery, have afforded important additional data.

I have also to add my recognition of the obliging manner in which access to the Prinsep Collection has at all times been accorded by the officers of the Medal Room in the British Museum. And, lastly, I must acknowledge the free reference conceded by C. Steuart, Esq., to the cabinet of his late brother, when necessary to decide any doubts left by the imperfection of the outlines of the Italian engraver who executed the original plates published in No. XII. J. R. A. S.

¹ "Anterior to the fourth century, A.D." Wilson, *Ariana Antiqua*, p. 410.

"Fourth" or "seventh" century, A.D. Sykes, *J. R. A. S.*, No. XII. 477.

About "153 B.C." Prinsep, *Journ. As. Soc. Beng.*, vii. 354.

extensive wandering from the truth, in the co-existence of three distinct collateral channels through which the examination of the details of this question may be conducted; and though it must be conceded that the insufficient, and at times inaccurate, evidence supplied by one species of testimony, may be difficult to be reconciled with the apparent facts, yet, on the other hand, anything like combined attestation derived from such diverse sources must bear a proportionately conclusive weight, and carry conviction in defiance of isolated obstacles. The tests to which these observations refer consist of,—1st, Coins; 2nd, Inscriptions; and 3rd, Written History, or rather the incidental contributions of Eastern and Western Authors¹, which must here supply its place. It is not proposed to enter into the unnecessary detail involved in the invariable application of these tests under their separate heads; it will be sufficient that they be severally kept in view throughout the examination of the various branches into which the entire subject divides itself. They have been brought thus prominently into notice, in order to show explicitly the *whole* means available for arriving at a correct judgment on a somewhat intricate question; as it will be seen hereafter that the present paper is illustrated by little if any new *matériel*, and that its value must depend solely upon the correct combination of previously known facts.

As the subject, in its different bearings and ramifications, is spread over some centuries, and refers to many distinct races, it may simplify its due demonstration to premise the various heads into which it seems divisible, subsequently examining these in detail. It is to be noted, in introducing this preliminary outline, that it has been found advisable, for the more satisfactory exposition of the whole case, to reverse the usual course of tracing successions downwards in the order of time, and, in lieu thereof, to work upwards from almost the only given and *admitted* local date we possess, the Valabhi *Æra*.

The following are the different divisions of the enquiry, placed in the order in which it is proposed to advert to them:—

- I. The Valabhi *Æra*.
- II. The *Local* supercession of the Guptas by the Valabhi Family.
- III. The identity between the Guzerát Guptas and the Guptas of the Allahabad Pillar Inscription.

¹ The last ground has been so thoroughly explored by fully competent scholars that it would be almost impertinent to attempt to add to what has already been cited on the subjects embraced, by modern writers both English and Continental; hence I have limited my task in this respect to the simple adoption of materials ready prepared to my hand, without any needless question of the accuracy of the translations or tedious reproduction of original texts.

IV. The verification of these Guptas as the immediate successors of the Indo-Scythians.

V. The interval between the rule of the Guptas and that of the Sáh Kings, and the traces of the intermediate possessors of the peninsula of Guzerát.

VI. The inherent title of the Sáh Kings to date in and before the century before Christ.

I. The Valabhi æra is fixed by undoubted evidence to have commenced in 319 A.D.¹ The exact epoch, however, in the lengthened sway of the dynasty whence the cycle takes its name, to which the initial date is to be referred, still remains undetermined. Mr. Wathen supposes that the reign of Sri Dhara Sena I. (the seventh in the Valabhi list²), witnessed the introduction of the new æra³, but from the prominent manner in which (his father) Griha Sena's name is recorded in Dr. Burns'⁴ No. I. Kaira Copper-plate Grant, it would seem that *his* accession, or some striking event of his reign, might well contest the honour of having originated the family cycle. This, however, is a matter which demands but slight discussion in this place, as it is sufficient for the purposes of the present enquiry to say that the æra of the Valabhis begins 319 A.D.⁵, and that—as is now to be shown—the Gupta rule preceded it.

¹ Albfrúni, Reinaud, 142, 143; Tod's Annals, i. 801; Inscription at Puttun Somnáth, dated in corresponding epochs of different æras, 662 A.H., Vikrama 1320, Balabhi 945; consequently, An. Valabhi I = 318-19 A.D.

² The following is Wathen's list of the early members of the Valabhi Family:—

I. <i>Senapati</i> Bhatarca; 144 or 190 A.D.	IX. Mahārāja Charagriha I., or Iswara Guha (Burns).
II. <i>Senapati</i> Dhara Sena.	X. Mahārāja Sri Dhara Sena II.
III. Mahārāja Drona Sinha.	XI. Mahārāja Dhruva Sena II.
IV. Mahārāja Dhruva Sena I.	XII. Mahārāja Sri Dhara Sena III. Mahārāja Dhruva Sena III. (Burns' Grant).
V. Mahārāja Dharapattah.	XIII. Mahārāja Siladitya II.
VI. Mahārāja Griha Sena.	
VII. Mahārāja Sri Dhara Sena I.	
VIII. Mahārāja Siladitya I.	

The order of succession in Burns' plate passes directly from No. I. to No. VI., omitting the intermediate names.

³ J. A. S. B., iv. 481.

⁴ J. A. S. B., vii. 966.

⁵ Mr. Wathen, at the time of the first publication of his Valabhi *Tamra patra* decipherments (J. A. S. B., iv. 481), was disposed to render the date of the earliest of these records as संवत् ९ Samvat 9 of the Valabhi Æra: subsequently (J. A. S. B., vii. 963) he found reason to distrust this reading, and without attempting to fix the value of the figures employed, to decide that the date

II. It must be admitted that the direct and independent evidence to prove this point, is somewhat incomplete, being confined to a con-

inscribed referred to the Vikramāditya Æra. Prinsep, in one of his latest papers on these subjects (J. A. S. B., vii. 354), had also expressed his conviction that, whatever cycle might be understood as applicable to certain other dates then under consideration, the Vikramāditya Æra alone "must" be held to have been in use in the Valabhi Copper-plate Grants.

A reference to the numerous Indian Inscriptions published in Vols. IV. and V. J. R. A. S., by Messrs. Wathen and Elliot, shows most distinctly the general prevalence of the official use of the Salivāhana or Saka Æra (79 A.D.), and amid the ample series of the grants thus made known, some are dated as early as Saka 411 = 490 A.D. (iv. 5, v. 343), and an inscription is quoted, bearing date Saka 488 = 567 A.D. (iv. 9). The extensive diffusion of the practice of expressing dates in the years of this cycle is also confirmed by its repeated employment in the Rāja Taringini (Troyer, ii. 376, 378), by the frequent appearance of the words *Sāl Saka* among the epochal references in the Mackenzie MSS. (Wilson, i. 163, 264, &c.; Taylor, J. A. S. B., vii. 389, 469, 496, &c.); and, finally, Tod distinctly asserts that the æra of Salivāhana "set aside that of the Tuar in the Dekhan"—a practice which may well have extended westward as well as southward.

These facts are perhaps sufficient to authorize an inference that the *Salivāhana* Cycle was used in many of the earlier instances wherein modern Commentators have heretofore supposed that the *Vikramāditya* was the æra employed; and hence, in the absence of any designation of the æra intended to be understood, it may be held as more than probable that both the early Gupta and Valabhi Inscriptions had their dates recorded in this cycle.

Adapting the Saka Cycle to the various dates referring to these families, the several epochs recorded will correspond as follows with the years of our own æra:—

1st. The Chandra Gupta Inscription at Sanchi, No. 1 (J. A. S. B., vi. 455), dated in figures श०३ or Saka *San 93* = 172 A.D.

2nd. The No. 1 Valabhi Grant of Wathen (J. A. S. B., iv. 481), dated thus श०३ Three hundred and odd Saka, corresponds with the early part of our fifth century.

3rd. The third Valabhi Copper-plate Grant (J. A. S. B., vii. 966) with the figured date श०५५५ (Ibid., pl. XX.), assumed to refer to some period in the second half of the fourth century Saka, falls in with the middle of the fifth century A.D.

It may be necessary to explain briefly the reasons which justify the supposition that the first Valabhi Grant should be held to precede the third by a period of half a century, more or less; and this may be most satisfactorily done by quoting the independent evidence comprised in the following comments annexed to the original translation of the latter document:—"But though there were six successions to the Gadi [between the execution of the first and third Valabhi Grants], these must have been of less than the ordinary duration, for the minister who prepared the Grant in Sri Dhara Sena's reign was Skanna Bhatta; whereas the minister who prepared the present Grant is named as Madana Hila, son of Skanna Bhatta; thirty or forty years will therefore be the probable interval occupied by the reigns of all the princes named as having intervened between Sri Dhara Sena I. and Dhruva Sena III."

jectural assertion of Albíruni's, to the effect that "apparently *Balabha* followed immediately after the Guptas." Whatever value is to be attached to this inference in itself, which however seems fully justified by the facts, one most important item is derived from the preceding part of the sentence, which introduces the deduction in question¹, viz., that a royal race of Guptas lived immediately prior to, and were exterminated in 319 A.D.

One of the main difficulties heretofore experienced in any attempt at a satisfactory allocation of these Guptas, so far as their dominion over the peninsula of Guzerát is concerned², has arisen from a too implicitly received dogma—based chiefly upon conclusions drawn from the dubious context of the Vishnu Purána³—that the termination of the Gupta sway should be referred generally to the seventh or eighth century; and consequently any effort to locate the *earlier* portion of the dynasty—which is supposed to have been closely limited in the number of its members—in Guzerát at or about a correspondingly

¹ "Quant au Goupta kála (ère des Gouptas), on entend par le mot *goupta* des gens qui, dit on, étaient méchants et puissants; et l'ère qui porte leur nom est l'époque de leur extermination. Apparemment Ballaba suivit immédiatement les Guptas; car l'ère des Gouptas commence aussi l'an 241 de l'ère de Saca." Albíruni, Reinaud, 143. Annexed is the Arabic text of the original.

واما كوبت كال فكان كما قيل قوما الشرار اقوياء فلما
انقرضوا اترخ بهم وكان بلب كان اخبرهم فان اول تاريخهم
ايضا متاخر عن شككال اعلم

² Wilson, *Ariana Antiqua*, 409; Prinsep, *J. A. S. B.*, vii. 354.

³ Mill (*J. A. S. B.*, vi. 11), referring to the passage whence his inference regarding the age of the Guptas is drawn, designates it as an "enumeration, strongly indicative of the disturbed and semi-barbarous condition of affairs which caused the suspension of all the ancient records, and in which synchronous dynasties might easily be mis-stated as successive ones, and the sum of years readily palmed on the Hindu reader, to enhance the antiquity of the classical and heroic ages of the country" [yet he trusts *this* text sufficiently to add the enumeration] "is succeeded, in the last period immediately preceding the rise of the Guptas, by something more resembling the records of earlier time." The result of his examination of the whole question is thus stated:—"It is scarcely possible to fix the subjects of our present inquiry, the Guptas, higher than the age of Charlemagne in Europe, if we suppose them identical with the Guptas of the Purána." Page 12, *idem*.

So also Wilson (*Ar. Ant.*, 419):—"These considerations harmonize with the inference afforded by the coins, and restrict the most modern period of the Gupta Kings of Magadha to the seventh or eighth century."

Prinsep hesitated in his entire acquiescence in Mill's conclusions, and would have moved up the date of the Purána itself "a few centuries," with a view to placing the Guptas in the very age it is now proposed to assign them to. *J. A. S. B.*, v. 644.

anterior epoch, has been met by the insuperable obstacle of the admitted local domination of other races of kings, of whose *independent* rule there could be little doubt.

This perplexity is now removed, as we have direct authority for placing a family of Guptas, evidently extensively paramount as sovereigns of India, at an æra closely antecedent to the rise of the Valabhí monarchs¹; a period in which neither history nor inscriptions claim for other sovereigns either local or suzerain supremacy over the peninsula of Suráshtra.

¹ The Arabic word Balhara, as used in reference to the Valabhís (Reinaud, *Relation des Voyages*, i. 24, 26, ii. 26; Masaudi, *O. T. F.*, i. 175, 193, 309; Gildemeister, *Script. Arab.*, pp. 13, 145, &c.), has been the subject of much and various speculation, in the hope of tracing through its derivative identification a connecting indication of the origin of those who, in later times, are seen to have borne it (Wilford, *As. Res.*, ix. 179). Tod (*Annals*, i. 801) endeavoured to show that as "Balnâth, the deity worshipped in Puttun Somnâth, *the City of the Lord of the Moon*, was the Sun-God *Bâl*, hence" came "the title of the dynasties which ruled this region, Bâl-ca-Raé, *the Princes of Bâl*, and hence the capital Balicapur, *the City of the Sun*," was "familiarly written Balabhi," and the word "Balicaræ" eventually "corrupted by Renaudot's Arabian Travellers into Balhara." Wathen (*J. A. S. B.*, iv. 481) was disposed to consider the term either as a corruption of Bhatarca भटार्क: Cherishing Sun (a royal title), or as a titular distinction locally derived from the name of a district near "Ballabhipura," called "*Bhala*," which, with the addition of Rai, would have furnished the Arabs with the designation in question. More lately an attempt has been made to prove the connexion of the word with the *supposed* Palahra on the coins of Vonones (Prinsep, *J. A. S. B.*, vii. 650). Of all these, perhaps the only derivation upon which complete reliance can be placed is Tod's *concluding* identification, and that adopted by Gildemeister, whose notice on the subject may be best given in his

own words:—"Nomen quod بلهري vel بلهري scribitur, Indopleusta et Masúdio auctoribus commune erat omnibus ejus familiæ regibus; secundum Hauqaliden desumptum est de regionis, quam tenebant, nomine. Utraque sententia recte se habet. Quinam Indicus rex Balharâ ille fuerit, diu latuit, nunc autem certo dici potest, postquam ea dynastia tum ex inscriptionibus, tum ex indigenarum annalibus, tum ex Sinensium relationibus nobis innotuit. Ea in urbe Valabhí, Guzzaræ peninsulae olim capite, hodie Balbhi vocata, decem milliaria Anglica septentrionem versus et occidentem a Bhowmugger sita, inde a quarto sæculo exstitit, et ab urbe vel regione Valabhí denominata est. Itaque vocabulum بلهري ortum est ex prákrita forma बलहिरात्र pro बलभीराज. Quum eo regnum

Gurg'arum et Sauráshtrám complecteretur, omnino recte Arabes ejus finium descriptionem tradiderunt; postea tamen multa in Balharam transtulerunt, quæ in alios Indiæ reges valent. * * * Posteriores deinde omnia conturbaverunt, et Balharæ ascribunt Kanog'æ regnum vel alia." *Scriptorum Arabum de Rebus Indicis*, pp. 42, 43, 44.

Moreover, an intimation of scarcely less importance is conveyed in the general tenor of Albíruní's expressions¹, which almost necessitate the conclusion that this particular race of Guptas were the *last* of the name who held any prominent place among the monarchs of India prior to the invasion of Mahmúd of Ghazní². Beyond this it is distinctly to be borne in mind that, with the exception of the deceptive epoch assumed from the Puránas, there is *no* date of any kind³ to interfere with the free decision of the question at issue, on the evidence here adduced.

From the various inscriptions left by the Valabhí monarchs, some casual indications might have been anticipated as throwing light upon the history of the race they succeeded. To speak generally, this expectation is not realized; the information on this head, to be gained from these sources, being confined to the not altogether unimportant fact that the immediate predecessors of the Valabhís were of the Hindú faith⁴. Allusion is indeed made in one place to the suzerain under whom the family first rose into notice, and from whom the title of Mahárája was first received by the third Senápatí; nothing, however, is to be gathered from this reference beyond the proof of the widely-spread paramount power of the sovereign thus alluded to⁵.

It would also be satisfactory, as affording an important connecting link between these races, to have been able to trace the possible

¹ "Leur extermination," &c., note, p. 6.

² It may be necessary to remind the reader that Albíruní lived under this monarch.

³ The date of the Gupta Alphabet seems to have been ruled from the *assumed* date of the dynasty; and to show how little reliance can be placed on the inference, in itself, by which the use of the characters of the Gupta Lát Inscription is held to have originated at so modern a period as is claimed for it by some, it is to be remarked that James Prinsep himself, although he entered this alphabet in his comparative Palæographic Table as dating from the fifth century, had already admitted that its employment would apply equally well to the third century A.D. (J. A. S. B., vi. 556), an opinion indirectly confirmed by his own expressions at the moment of the publication of the Table itself (vii. 275), and distinctly repeated afterwards (vii. 348). In like manner, those who would follow the erroneous identification of the Phi che li (Vaisáli) of Fa Hian with the ancient Prayaga, the modern Allahabad (J. R. A. S., vi. 301), are to be warned against indulging in any inference, regarding the antiquity of the Guptas, based upon Fa Hian's omission to mention the Asoka and Gupta Lát, which he *might* possibly have seen had he visited the true Prayaga. (See Foe Koue Ki, p. 242; J. R. A. S., v. 128, &c.)

⁴ J. A. S. B., November, 1838.

⁵ "From the great Sovereign himself, the sole Monarch of the entire world." (J. A. S. B., Wathen, iv. 485.) Mr. Wathen adds—"This evidently refers to some one of the successors of Vikramaditya and Salivahana, the Pramara or Powar Kings of Ujain or Kanauj."

affinity as existing in their respective coins, which the general practice of Indian monarchs more or less distinctly develops in the early imitation by the succeeding family of the types of money found current in the dominions of their predecessors. As yet, however, no medals of the Valabhi dynasty have been definitively identified¹, though a certain shadowy connexion might possibly be based upon the similitude between the device of the Valabhis, the Bull Nandi, as seen on their seals and inscriptions, and the self-same symbol to be found on the Suráshtran coins of the great Skanda Gupta².

It may be unnecessary to pursue further this branch of the inquiry, as, however imperfect in itself, as it now stands, the concession of its most important bearing will be claimed hereafter under other proofs, which do not properly belong to this portion of the investigation.

III. The demonstration of the identity between the heretofore denominated Kanouj Guptas and the monarchs of the same name who were supreme in Guzerát, is perhaps not so easy as might at first sight be anticipated³, inasmuch as there is a necessary absence of the infallible proof offered by an uniformity of coinage, arising from the practice even then prevailing of retaining but slightly modified the forms of the existing currency of each kingdom that fell to the arms of a conqueror. Hence, though the Gupta *Guzerát* coins evince indubitable signs of derivation from the types of the money of the earlier Suráshtran Kings, they naturally offer few points of coincidence with the gold coins of the countries to the northward and eastward, whence the power of the Gupta race—whose identity it is now sought to establish—took its rise. Notwithstanding this, the number of miscellaneous

¹ The *Ītāriah Dirhems* الدراهم الطارية noticed as current in the ninth century, by Renaudot's Arabian Traveller, and subsequently adverted to by Ibn Khordadbeh, Ibn Haukal, and Masaudí, convey too recent a reference to furnish any assistance in the recognition of the Valabhi currency; the money alluded to by the first of these authors may possibly be identifiable with the silver "*Gadhia ká paisa*," which must have been current about this time, and which agree sufficiently with the weight indicated by the Arab authority, $1\frac{1}{2}$ dirhems (which is proved to be equal to 67½ gr.; Marsden, xvii). Specimens of this *Ass-money* are extant, weighing over 66 gr., though the average weight of worn specimens is of course somewhat less. (See Renaudot, Reinaud, i. 25; Script. Arab., pp. 28, 166; Masaudí, O. T. F., p. 389; Prinsep, J. A. S. B., iv. 687; Wilson, Ar. Ant., 413.)

² It may indeed be a question whether these and other types of the ample Skanda Gupta coinage did not constitute the bulk of the entire currency under, if many of them were not actually struck by, the earlier members of the Valabhi Dynasty, while acting as *local* sovereigns, on behalf of the Gupta suzerain.

³ Prinsep, indeed, assumed the fact as a matter of course (J. A. S. B., vii. 37). So also Wilson, in an uncertain way (Ar. Ant., 409).

indications of connexion between the two races about to be noticed, scarcely permit a doubt that the monarchs in question were of one and the same house.

The various links in the chain of evidence, at present within reach, tending to prove this connexion, may be briefly enumerated as follows:—1stly. The inference deducible from the knowledge gained by Prinsep's revised decipherment of the Allahabad Inscription¹, that the Gupta family therein chronicled possessed Guzerát. 2ndly. The Third (undeciphered) Inscription on the Girnár Rock, in the peninsula of Guzerát, records the name of Skanda Gupta. Prinsep, to whom alone the secrets of this monumental writing were known, does not hesitate to announce this prince as "one of *the* [then denominated Kanouj] Guptas²." 3rdly. The correspondence of the fact stated on the Bhitári Lát, that Skanda was the immediate successor of Kumara, with the evidence to the same effect afforded by the Guzerát coins *per se*. 4thly. The identity of the title of Skanda Gupta कर्मादित्य Kramáditya—as found both on his gold coins of the so-called Kanouj type³, and on his silver Suráshtran pieces⁴. 5thly. The curious coincidence noticeable in Skanda Gupta's alteration of the reverse symbol of his own Suráshtran coins, from the device originally adopted from his immediate predecessor, Kumára⁵ Gupta, to the effigy of the Bull of Siva, Nandí,—which now appears for the first time on these pieces,—and the prominent fact explicitly dwelt upon in the Bhitári Lát inscription, that Skanda Gupta was a firm adherent of the worshippers of Siva, as contradistinguished from the Vaishnaví leaning of those he succeeded⁶. 6thly, and lastly,

¹ "Magadha, Ujjayani, and Surasena are omitted; these, therefore, in all probability, were under his [Samudra's] immediate rule." Prinsep, J. A. S. B., vi. 975.

² J. A. S. B., vii. 348. "I may here so far satisfy curiosity as to state that this third inscription, the longest and, in some respects, the best preserved, though, from the smallness and rudeness of the letters, it is very difficult to decipher, is in a more modern character—that allotted to the third century after Christ—or the Gupta alphabet; and that in the opening lines I find an allusion to Skanda Gupta, one of the GUPTA family, whose name has also been found upon a new series of the Suráshtra coins." A facsimile of this inscription, taken with much care by Messrs. Westergaard and Jacob, has been published in the Journal of the Bombay Branch R. A. S. for April, 1842. No transcript or translation has been attempted.

³ J. A. S. B., v. pl. 34, fig. 17.

⁴ Idem, vii. 356, pl. XII. figs. 18, 20.

⁵ Annexed Plate II. figs. 39, 40, 41, 42.

⁶ Mill, J. A. S. B., vi. 9. It may be useful to annex a detailed reference to the several Gupta Inscriptions at present known:—Allahabad, Mill, J. A. S. B.,

is to be cited the important reference (which more peculiarly belongs to the next division of the subject) conveyed in the superscription of the Indo-Scythic NANO, or PAO NANO¹, on the obverse surface of the Suráshtran coins of Kumára and Skanda Gupta, and the appropriation of the exact types of the Indo-Scythian gold coinage by the earlier members of the Gupta family in their Eastern dominions, which are also duly retained by both Kumára and Skanda.

IV. The next point in the general inquiry—the identification of the Guptas as the immediate successors of the Indo-Scythians—has, in so far as the numismatic coincidences extend, been fully and satisfactorily proved by Prinsep and Wilson: all that now remains to be done is to apply the already prepared arguments to the altered bearings of the question. So long ago as November, 1835, the first-named author demonstrated by conclusive comparisons “the Indo-Scythic paternity of the Kanouj [Gupta] coinage.” In October, 1836, a paper by the same writer appeared in the Journal of the Asiatic Society of Bengal, which more distinctly and unequivocally developed “the transition from the Mithraic or Indo-Scythic coinage to the Hindú series,” at the head of which stands the currency of the Guptas. Professor Wilson also, in his *Ariana Antiqua*, in one place², after enumerating other more obvious resemblances between the two classes of medals, goes on to notice the similarity which extends even to the monograms, which

iii. 257; Mill's *Bhitarí Lát*, vi. 1; revised by Prinsep, vi. 969; Skanda Gupta, vii. 37; vii. 348; Chandra Gupta, at Sanchi, Bhopal, vi. 455; Budha Gupta, Ságor, vii. 634.

The following is an authoritative list of the Gupta Kings, as extracted from their Inscriptions:—

- | | |
|--|---|
| “ 1. Gupta. | 6. Kumára Gupta. |
| 2. Ghatot'Kacha. | 7. Skanda Gupta. |
| 3. Chandra Gupta I. (1st Maharája Adhirája). | 8. Mahendra Gupta (noticed as a minor only in the Inscriptions; the name is assumed from Coins).” |
| 4. Samudra Gupta. | |
| 5. Chandra Gupta II. | |

Mill, *J. A. S. B.*, vi. 8.

¹ See *J. A. S. B.*, vii. 356. Prinsep, at the time he proposed this reading, did so with but small confidence. A comparison of an extended series of this class of Suráshtran coins with the Indo-Scythic pieces of the Kanerki gold series, leaves no doubt of the accuracy of the identification. Indeed, if any additional faith is to be given to an independent though *subsequent* recognition of one and the same fact, it may be mentioned that my first detection of the real meaning of the corrupt Greek letters on the first-named coins was suggested by a transcript of the legend of a Kanerki coin, to be found among Mionnet's fac-similes of Barbarous Greek (viii. pl. iv. fig. 28), before I became aware that Prinsep had already published a similar rendering.

² Page 418.

were copied by the Hindú imitators from the Indo-Scythic prototype¹, all of which are mentioned as capable of being cited "as evidence that the coins of the Gupta princes succeeded *immediately* to those of the Mithraic princes, and that the former reigned from the second or third to the seventh century."

Prinsep does not seem to have insisted sufficiently upon the full force of the inference², that, the derivative which retained in such freshness the impress of its model, was in all probability immediate, and was extremely unlikely to be a deferred revival of a temporarily disused coin. Professor Wilson's perception of the real value of the evidence was more distinct, but his conclusion was deprived of much of its just weight by the indecision of his closing observation, which left a brief dynasty of eight kings³ to find their own position in so undefined a period as five centuries⁴.

But little, perhaps, need be added to such authoritative testimony, further than again to point to the fact noted above, of the still more distinct evidence of association—of what precise character is not so clear—to be drawn from the discovery of the words PAO NANO—the almost uniform titular prefix of the Kanerki Indo-Scythian gold series—on the Suráshtran coins of the Guptas.

The results deducible from the combined evidence of coins and monumental inscriptions, regarding the progress of the power of the Gupta dynasty, may be summed up in a few words. In the time of the full supremacy of the family, their empire clearly extended from

¹ See also the identity of reverses of Ghatot Kacha coin, J. A. S. B., v. 38, fig. 12 and of the Ardokro Indo-Scythic piece, J. A. S. B., 1845, p. 440, pl. 12, fig. 10.

² J. A. S. B., v. 644.

³ Prinsep remarks, "It does not appear who succeeded him [Skanda Gupta], or whether the Gupta Dynasty there terminated; but I think it is open to conjecture that the whole power was usurped by the Minister's family, because," &c. J. A. S. B., vii. 38.

⁴ Since the above was read before the Royal Asiatic Society, Colonel Sykes has communicated to me the following observations, conveyed in a late letter from Captain Kittoe. The deductions in question, valuable in themselves, as derived from entirely new sources, and as the result of independent inductive reasoning, will be seen to corroborate in a remarkable manner the date of the rise of the Guptas already pointed at in the text.

"I have had four valuable copper-plates, from Nagode, in Bundulkund, of Sri Hastina, a cotemporary of Samudra Gupta, for he is named by the latter in the Allahabad Inscription (see J. A. S. B.), translated by Mill. These plates fix the number of years passed of the Gupta Dynasty at that time, viz., 163; this will prove the correctness of the Vansavali, as given on the pillar, and will prove, I think, that the Guptas reigned from the second to the fifth century A.D."

the foot of the hills of Nipál' on the north-east, to the extremity of the peninsula of Guzerát on the south-west¹; its southern boundary is not so well defined, but to the north-westward, suzerainty was claimed over the Punjáb to the banks of the Indus'. The same data seem to indicate that the possession of the more western portion of the empire was not obtained till a period subsequent to the consolidation of the kingdom on the Ganges. A possibly important point, also gained from these sources, is that *this* paramount Hindú race, who in later times, at all events, reigned *over*, if not *at* Ujein, is seen in two distinct instances to use the title of Vikramáditya⁴.

Having attained thus much of an apparent footing from information gained through other channels, it is necessary to examine whether the *written* testimony of the Hindús in any way corroborates the present conclusions. Without conceding the least faith to either the inductive or direct chronological data to be derived from the craftily-imagined and most inextricably-jumbled post facta prophecies of the Vishnu Purána, it may be sufficient to accept from its pages the bare position, and the partially confirmatory geographical information conveyed in the pretended prediction⁵:—"After these various races will reign" * * * "and the Guptas of Magadha along the Ganges to Prayága."

The Rája Taranginí, the "*only*" Sanskrit Indian History extant, though avowedly local in its purpose, gives promise—could we but rely on its chronology—of unexpected illustration of the present subject of enquiry, inasmuch as it notices a Vikramáditya of Ujein, specified particularly as Emperor of India⁶, who nominated Matri Gupta (the only *Gupta*, be it remarked, in the list, within many centuries of the possible time in question) to the throne of Kashmír; moreover, to extend the coincidences, this Vikramáditya is cited as having previously expelled the Mléchchhas and destroyed the Sakas. The following are the dates of accession of Matri Gupta, as given in the original, and by the several commentators: Rája Taranginí, Wilson, 117 A.D.⁷;

¹ Bhitári Lát (Ghazipúr District), "Kosala" (Oude) of Allahabad Inscription, J. A. S. B., vi. 971. Nipál, idem, 973.

² Skanda Gupta Inscription at Girnár, J. A. S. B., vii. 348.

³ Yaudheya, J. A. S. B., vi. 973.

⁴ Chandra Gupta, J. A. S. B., v. 650; Skanda Gupta, *infra*, Pl. II. fig. 51.

⁵ Wilson's Vishnu Purána, 479. The date of this Purána is fixed by Wilson about 954 A.D. Mill quotes the passage thus:—"And in Padmávati, Kánti purí, Mathurá and on the Ganges from Prayága, shall the Magadhas and the Guptas rule over the people belonging to Magadha." J. A. S. B., vi. 10.

⁶ Histoire des Rois du Kachmír, ii. 76 (Troyer); Wilson, As. Res., xv. 38.

⁷ As. Res., xv. 81.

Troyer, 118. 11 A.D.¹: Adjusted dates, Wilson, 471 A.D.; Troyer, 123. 3 A.D.; Cunningham, 430 A.D.² As it is manifest that the chief value of a determination of the identity of the individual, indicated as *Srī Harsha Vikramāditya* of Ujein, in the Sanskrit text, with any member of the family more immediately under consideration, would consist only in a possibility of thereby fixing with more exactness the epoch of the latter, it is useless to encumber the present essay with extended observations based upon such uncertain data. Neither under any circumstances should undue emphasis be laid on a catch identification of any one of the many *Vikramādityas*³; nor is much to be gained from a recognition of the possessor of the second title of *Sakāri*, or even the more direct fact of a partial defeat of the Scythians⁴, as proved to have been effected by any given individual. The designation of *Vikramāditya* is shown, both by the Eastern and Western series of the Gupta coinage, to have been already in established use as a mere *title*, in contradistinction to its supposed retention as a distinct *name*⁵. As there were many *Vikramādityas*, so probably there were many *Sakāris*; every frontier encounter with the Scythians which did not result in absolute defeat of the Indian forces, would, under the usual terms of Oriental hyperbole, entitle the local monarch to the honorary appellation of "Foe of the Scythians;" and whatever may have been the real effect of the vaunted success of *Vikramāditya's* arms against the *Sakas*—now conclusively dated—in 78 A.D.⁶, it is clear that, in some divisions of Northern India, the

¹ Histoire des Rois du Kachmīr, ii. 365, 378.

² Cunningham, Num. Chron., vi. 18.

³ Wilford, As. Res., ix. 117.

⁴ Taking the term *Saka* in its generic sense, as it was probably used, without entering into the divisional distinctions of *Tochari*, &c., noticed in *Ar. Ant.*, 138, 139.

⁵ Pl. II. fig. 51; III. No. e; and Appendix, Pl. VII. fig. 7.

⁶ "L'ère de *Saca*, nommée par les Indiens *Sacakāla*, est postérieure à celle de *Vikramaditya* de 135 ans. *Saca* est le nom d'un prince qui a régné sur les contrées situées entre l'Indus et la mer. Sa résidence était placée au centre de l'empire, dans la contrée nommée *Aryavarthā*. Les Indiens le font naître dans une classe autre que celle des *Sakya*: quelques-uns prétendent qu'il était *Soudra* et originaire de la ville de *Mansoura*. Il y en a même qui disent qu'il n'était pas de race indienne, et qu'il tirait son origine des régions occidentales. Les peuples eurent beaucoup à souffrir de son despotisme, jusqu'à ce qu'il leur vint du secours de l'Orient. *Vikramaditya* marcha contre lui, mit son armée en déroute, et le tua sur le territoire de *Korour*, situé entre *Moultan* et le château de *Louny*. Cette époque devint célèbre, à cause de la joie que les peuples ressentirent de la mort de *Saca*, et on la choisit pour ère, principalement chez les astronomes. D'un autre côté *Vikramaditya* reçut le titre de *sri* (grand), à cause de l'honneur qu'il s'était acquis. Du reste, l'intervalle qui s'est écoulé entre l'ère de *Vikramaditya* et la mort de *Saca*, prouve que le vainqueur n'était pas le célèbre *Vikramaditya*, mais un autre prince du même nom." *Albérúni*, *Reinaud*, pp. 140, 141, 142.

Tochari, or Yuë-Chi, continued to furnish Scythic opponents for the occasional display of heroism on the part of the indigenous monarchs until at least the early portion of the third century of our æra¹. The complete decay of the Indo-Scythic empire, whether due on the one hand to successive losses of frontier provinces, or to the less perceptible fusion² of the races of conquerors and conquered on the other, was manifestly a work of time, and apparent traces of the surviving power of the race were to be detected west of the Indus so late as the end of the fourth century³.

V. These considerations lead naturally to the next division of our theme, the interval between the sway of the Guptas and that of the Sáh kings, and the question whether the succession of the Guptas was immediate or deferred. In following out this enquiry, the principal point to be determined is, whether the Indo-Scythians—the predecessors of the Guptas in other parts—also possessed Suráshtra; a conclusion which is apparently affirmed by the appearance of their dynastic title on the local silver coinage issued by these Guptas.

¹ Note upon Ma-twan-lin, J. A. S. B., vi. 63; also Pauthier, "Thian-tchu," extract from the Journal Asiatique, 1839, note, p. 9.

² M. Pauthier (Thian-tchu, Journal Asiatique, 1839) notices a curious enquiry, suggested by the similarity of meaning existing between the words Youë chi and Chandra Vansa: subjoined are M. Pauthier's translation of the Chinese text and his own notes on this head:—

"Dans la Relation des contrées occidentales (Si-yu), le royaume du Thian-tchu est nommé par quelques-uns *Chin-thou*; et on le dit situé au sud-est des Youë-chi^a ou 'peuple de race lunaire' à la distance de quelque milliers de li. Les mœurs de ses habitants sont les mêmes que celles des Youë-chi^b." Page 7.

^a "Youë-chi, mots ethniques qui signifient de race lunaire, absolument comme le terme sanskrit चन्द्र वंश *tchandra-vansa*. Voy. la notice sur ce peuple célèbre (que l'on croit être les Indo-Scythes des historiens occidentaux), que nous avons traduite du Pian-i-tian, liv. LII. art. 2."

^b "Sou-yu youë-chi-thoung: mores eum (τοῦ) Youë-chi (moribus) idem. Quelque extraordinaire que cette assertion paraisse, elle confirmerait le soupçon que nous avons déjà émis ailleurs, que les Youë Chi ou hommes de race lunaire pourraient bien avoir la même origine que les rois Indiens, aussi de race lunaire, tchandra-vansa."

May not these coincidences, conjoined to the curious verbal similarity to be detected between NANAIA and NANO, suggest the possibility of the meaning of the latter referring to the moon, and thus PAO NANO PAO being, the King, the Lunar King, or King of the Lunar Race?

See also remarks bearing upon the general subject in J. A. S. B., iv. 677, 684; and Tod, Trans. R. A. S., i. 207; also Annals of Rajpootana, i. 24, 563.

³ Wilson, quoting Foe kue ki, Ar. Ant., 307. See also Fœi kouë ki, 83—"Les rois des Yuë ti continuèrent d'exercer l'autorité dans ces diverses contrées jusque dans le III^e siècle. Au commencement du V^e siècle, on parle encore de leurs incursions dans l'Inde." M. Rémusat.

Previous to seeking other evidence, it may be as well to examine the indications offered on this head by the respective coins of the Sáh and Gupta monarchs, in their simple relation to each other as a prior and subsequent series, and hence to determine whether the silver currency of the latter was a directly consecutive adaptation of the circulating medium of the former—a revival of a coinage whose issue had been suspended, but whose previously-uttered pieces still remained prevailingly current and un superseded—or, lastly, whether the model of the Guzerát currency of the Guptas was taken from an intermediate modification, which may possibly have formed the connecting link between the moneys of the two races. The more obvious mechanical features displayed by the coins themselves go far to assist a definite selection from among these theories. In the first place, the fidelity with which the main characteristics of the Sáh head are reproduced on some of the earlier specimens of the Gupta coins, seems to negative the idea of the latter having been copied from any inferior model, and should suffice in itself to set aside the claims of the last-named *secondary* transition. The Greek legend on the obverse, on the other hand, shows signs of a material change from the unintelligible, though squarely-outlined and very Greek-looking, letters of the Sáh kings, to the ill-formed and straggling Hellenic alphabet in use among the Indo-Scythians, and points plainly to the occurrence of an interval—indefinite perhaps—between the fabrication of the one class and of the other. The variation also in the expression of the Sanskrit letters on the reverse, evidences extensive modification, such as could only have resulted from some considerable lapse of time¹, and which it would be impossible satisfactorily to explain by any notion that the Gupta artists summarily introduced the form of writing current in the countries whence their masters came, to the permanent supercession of any characters in prevailing local use. The change from the old reverse device is of no import in its bearings upon the present enquiry, as it must have been effected from religious motives, entirely irrespective of any circumstances incident to direct or interrupted succession. The palpable modifications in both the Greek and Sanskrit alphabets now noticed, may be held to prove that the transition from one series of coins to the other was by no means immediate; an inference which is strongly corroborated by the recognition of a distinct group of medals also derived from the original Suráshtran

¹ Compare Nos. 1 to 12 with *a, b, c, d, e*, Pl. III. Prinsep had already remarked that "The Asoka alphabet (the Sanskrit one) agrees very closely with that of our Surashtra coins, which may thence be pronounced to be anterior to the Gupta Series." J. A. S. B., vii. 275.

stock, whose palæographic peculiarities, in associating them obviously and intimately with *the* Sáh exemplars, contrast broadly with the mutations observable in the Gupta series. (See 1st Sub-species, p. 56, Pl. II., figs. 35, 36, 37, 38) Reviewing all these facts, and giving the requisite weight to the token of the intervening Scythic supremacy conveyed in the use of the title of their chiefs on the Gupta Guzeráti pieces, as well as to the valid presumption, hereafter to be noticed, that the Indo-Scythians themselves did not generally coin silver money, it appears necessary to conclude that the Guptas, on their conquest of the kingdom of Guzerát, contented themselves with remodelling the ancient Sáh coinage, which, from the numbers in which its representatives are still to be found, may reasonably be presumed to have continued to constitute the bulk of the currency of the province at that epoch.

Some objection might be taken to the apparent inconsistency of claiming for the Guptas a direct succession to the Indo-Scythians on the strength of similitude of coinage, when in a nearly parallel instance of imitation by the Guptas of the Suráshtran money, an interval of somewhere about one, or one and a half centuries is admitted to have occurred. If these several facts stood alone, and were to be tried only on their own internal merits, this objection might indeed be valid, but it is to be borne in mind that a very slow process of change would apply to the coinage of a country so nearly isolated in its natural boundaries as the peninsula of Guzerát : as, from the very nature of its geographical outline alone, it is probable that the purely local currency of the kingdom was, on the one hand, little liable to be exported, and, on the other, was but slightly affected by the admixture of foreign specie ; so that any endeavour towards a revival of this indigenous currency would both find plentiful models of the old form of coin ready at hand, and, supposing such pieces still to constitute the bulk of the circulating medium, there would be a reasonable motive for imitation—even though remotely delayed—in the desirability of uniformity alone.

To the broad continent of Northern India a very different rule would apply, and amid the diverse series of imitations derived from the Indo-Scythic stock, now known to have existed in this region, the Guptas, had they succeeded at any *distant* epoch to the countries once belonging to the Indo-Scythians, and proposed to themselves to assimilate their own money to the later issues, would have been more likely to have *copied* the already existing imitations, rather than, as they are seen to have done, the best originals. Or, had they to choose a new mintage irrespective of successional associations, there must

have been other and *purer* models in the land, in the very perfect coins of the Bactrian Greeks, once largely concurrent, and necessarily to a late date co-existent, with the money of the Indo-Scythians, upon which the new types of coinage might advantageously have been based.

Again, in respect to the characters employed on the several series—a change from one language, the Greek, to a totally distinct tongue, the Sanskrit, in all medallie superscriptions emanating from the Eastern mints—accounted for as it is by a reasonable probability of the supercession of the former as a foreign tongue, in favour of the official language of the new ruling power, which was at the same time more assimilated to that of the people at large—would evidently require no lapse of time to accomplish; but a very different explanation is required for the numerous subsidiary modifications in the local alphabetical characters seen on the Gupta Suráshtran coins, as compared with the more ancient letters of the same class on the original money of the Sáh kings.

These pervading alterations could under no circumstances have been effected by any sudden process, or by any revolution which did not admit of a considerable interval between the use of the one form of writing and the other.

In the absence of either direct history or the more trustworthy record of monumental inscriptions, the next source of information to which it is requisite to apply, is the detached notices^o of classical writers, who in any way refer to the land and the people more immediately under review. Prominent among these is the reference to Mámbarus to be found in the *Periplus of the Erythrean Sea*¹. This, however, when brought to the test of critical accuracy, is found to be useless for any present purpose, inasmuch as, in addition to the avowed difficulty attendant upon the satisfactory explanation of the text itself, as it has been handed down to us, there remains a nearly

¹ Vincent's *Periplus*, p. 98, and *note* on Mámbarus at the conclusion.

Original Translation.

"Next to the bay of Barákè succeeds the gulf of Barugáza, and on this gulf is the commencement of the whole [peninsula] of India, as well as the kingdom of Mámbarus, towards [the confines of] Ariakè."

"I have attributed the sovereignty of Ariake or Concan to Mámbarus, and I am now convinced that his dominion was Guzerát. * * I made the Parthian power at Minnagar, on the Indus, extend over Guzerát, whereas in reality it embraced only Scindi and Kutch."

Vincent's Proposed Emendation.

"Next to Barákè immediately succeeds the gulf of Barugáza, and the commencement of the province of Lár, [which is] the kingdom of Mámbarus, and the whole of this part of India has the same commencement."

THE SAH KINGS OF SURASHTRA.

equal degree of incertitude regarding the precise epoch¹ to which the amended textual reading—if received—should be held to apply. Hence, even admitting to the full that the original allusion to Larike and Mámbarus is now correctly interpreted, the doubt still remains as to *when* this condition of things is to be made applicable to the kingdom more particularly in question. Thus the independence of Guzerát, at the moment of the visit of the Author of the Periplus, if acknowledged as a fact, does not under these circumstances possess any great historic value; nor would even the exact ascertainment of the epoch testified to, do more than prove the temporary existence of the kingdom of Mámbarus, or by any means demonstrate that the Indo-Scythians did not—either prior or subsequent to the given date—conquer the peninsula of Guzerát².

Fortunately for the satisfactory decision of the present question, we have the evidence of a nearly contemporaneous writer, whose statement, though not in unison with the dubious reading of the text of the Periplus proposed by Vincent, is in itself clear and distinct to the point it is now sought to elucidate—the tenure of the peninsula of Guzerát during a portion at least of the time during which the Scythian monarchy at Minnagar was in effective force. From the testimony of Ptolemy it is amply manifest that Guzerát *once* formed a portion of the Indo-Scythian empire, the chief seat of which was on the banks of the Indus³.

Having determined the main question of fact, it is requisite to pro-

¹ Vincent, "about 63 A.D.," *Commerce of the Ancients*, ii. 57 and 685; Heeren, "during the first, or, at latest, during the second century A.D." *Asiatic Nations*, ii. 565, Lond., 1846.

² "Ozène" is noticed in the Periplus "as *formerly* the seat of government" (p. 102). This would be by no means an unimportant piece of information, as showing that in the time of the second Arrian, Ujein was no longer an Imperial metropolis, were it not that it is somewhat difficult to reconcile this statement with the assertion of Ptolemy, who calls it "the capital of Tiástanus, and his royal residence." Vincent, *Commerce of the Ancients*, ii. 406.

³ Lassen, quoting Ptolemy, *J. A. S. B.*, 1840, pp. 756, 757.

In support of the conclusion arrived at above respecting the Scythian conquest of Guzerát, it may be expedient to cite the decisive opinion expressed on this head by so able a Numismatist as Capt. Alexander Cunningham, Bengal Engineers, an Antiquary who has moreover devoted special attention to the subject of the geographical limits of the Bactrian and Indo-Scythian monarchies:—"In the most flourishing period of their rule, the Indo-Scythians, under Kanerki and his immediate successors, must have possessed not only Kashmir itself, but also the whole of Gandhara on the Indus; and from Kabul on the west, as far as the Ganges on the east, down to Barygaza or Baroach on the south." *Num. Chron.*, vi. 2, *Article*, "The Ancient Coinage of Kashmir;" see also *Num. Chron.* viii. 175, "Chronological and Geographical Table of Alexander's Successors in the East."

ceed to that of degree, and to consider what was the nature of the tenure thus established. We learn from the Chinese, "That at the period when all these kingdoms belonged to the Yuë-Chi, the latter put the local kings to death and substituted military chiefs¹." Hence it is but reasonable to infer that Guzerât, on its subjection, was put upon the same footing as the other countries which fell to the arms of the Indo-Scythians, and that the form of government previously prevailing in the peninsula was superseded by the usual military despotism of the conquerors. The application of this system to Guzerât in itself accounts for much that was inexplicable in the examination of the numismatic portion of the question, when confined to the results deducible from its own internal evidence, as developed solely by the medals themselves. Under a general scheme of provincial government by military chiefs, having in their own persons no pretence to the privileges or dignities of even dependant *kings*, it is probable that the local coinage was suspended in favour of *one* uniform imperial issue. The monetary standard of the Indo-Scythians was, without question, gold, as amid the multitude of their coins extant only *one* genuine *silver* piece is known². It has already been remarked by Professor Wilson³ that their silver currency consisted chiefly of the coins of their Bactrian predecessors, so also we may infer that, in like manner, in the province of Guzerât, the pre-existing silver currency was held to be sufficient for the wants of the community, especially when aided, as it now was, by the introduction of the more valuable and heretofore probably unknown gold coinage, at that period peculiar to these tribes.

If the data now cited, and the deductions drawn from them, are correct, it appears that the Indo-Scythians of Minnagar ruled over Guzerât—that during the time of their sway over this peninsula the issue of local silver money was not sustained; hence, admitting the obvious priority of date of the Sâh silver coins over those of the Guptas—for which indeed they are seen to have furnished the prototype—and rejecting all idea of the intervention between the Scythians and the Guptas of a dynasty whose united reigns can scarcely have

¹ Ma-twan-lin, *Pauthier*, *Asiatic Journal*, LXXIX. and LXXX., 1836; the same, *Stan. Julien*, *Journ. Asiatique*, X. 95 (1847); so also Thian Tchu, *Pauthier*, *Journ. Asiatique*, 1839. "A cette époque [159 A.D.] tous ces royaumes (Kaboul et les divers états de l'Hindoustan) appartenaient aux *Youi Chi*, ou peuple de race Lunairo. Les *Youi Chi* avaient fait mourir leurs rois, et établi à leur place des commandants militaires pour gouverner tous leurs sujets."

² *Ar. Ant.*, pl. xi. fig. 9.

³ *Ar. Ant.*, 348. See also Cunningham, *Num. Chron.* vi. 7 (1843).

spread over less than a century and a half, it results that the Sáh kings preceded the Indo-Scythians.

It is *now* pretty generally conceded that the Yuē-Chi (Tocharians) conquest of Western India should be dated in or about 26 B.C.¹ It is, therefore, anterior to this epoch that the domination of the Sáh kings must be placed.

Having attained this approximate date from comparatively external and subsequent indications, the next step in advance leads to an examination into the intrinsic claims of the coins themselves to date prior to 26 B.C., as well as to a consideration of any testimony specifically applicable to the history of the Sáh kings, whose names are borne on the coins in question.

VI. It may be convenient to commence this section of the enquiry with "The Sáh Kings'" own account of themselves, as preserved in *their* inscription engraved on the rock at Gírnár²,—the monumental record stone of three several dynasties.

The amount of information derivable from this inscription³ is less

¹ Ma-t'yan-lin, J. R. A. S., 1836; also Journ. Asiatique, 1839; Lassen, J. A. S. B., 1840, p. 765 (40 B.C.); Cunningham, Num. Chron., viii. 175; Ar. Ant., 301.

² "The rock containing the inscriptions is about a mile to the eastward of Junágad, and about four miles from the base of Gírnár, which is in the same direction." Rev. J. Wilson, J. A. S. B., vii. 337. See also a subsequent paper in the same volume (p. 865), by Lieut. Postans, giving a full account of the adjacent localities.

³ On first arranging the materials of the present paper, I was prepared to rely implicitly upon Prinsep's translation of the Gírnár Bridge Inscription; but on its subsequently coming to my knowledge that a second more perfect facsimile of the original record had been taken by Major Jacob and Mr. Westergaard, and a lithograph copy of the same made public in the pages of the Journal of the Bombay Branch Asiatic Society, I was induced to apply to this transcript, with a view, at the least, of checking any possible errors in the more prominent names of men and countries that might have crept into the less perfect copy of the inscription furnished to Jas. Prinsep by Dr. Wilson, from which the original decipherment was obtained. In the progress of my examination, I was startled to find very extensive variation, both in the number and value of the letters as given in the two copies; indeed, the mere discovery that the opening name, read by Prinsep as *Ari Dámá*, was in the new transcript clearly and unquestionably *Rudra Dámá*—the identical designation that occurs in the concluding portion of both copies of the inscription—was enough to satisfy me that a complete revision of the entire document was now absolutely requisite. Under these circumstances, I at once applied to Professor Wilson, who readily undertook the task, permitting me, in the most liberal manner, to make full use of his new translation, which I am gratified in being able to announce will shortly be published in a separate form, illustrated by the needful notes and remarks. Such being the case, I have confined my notice of the inscription to such extracts and observations as were indispensable to elucidate the special subject of the coins of the Sáh kings.

complete than might have been anticipated, owing chiefly to the mutilated state of the face of the stone whereon the writing is cut, having created a succession of breaks in the context which it is at times difficult to supply. We learn however, generally, that the repair of the Girnar Bridge or Causeway, which the monumental writing is designed to commemorate, took place during the reign, and under the direct auspices of Rāja Mahā Kshatrapa Rudra Dāmā, the son of Swāmī Chandana. The structure itself would seem to have been originally undertaken by Pushpa Gupta [the son, or officer] of Chandra Gupta Maurya, and subsequently completed under the direction of Tushasya, the superintendent of Asoka Maurya. Thus erected, it may be supposed to have stood until carried away by the flood of the Palesini, which necessitated its reconstruction in the time of Rudra Dāmā: what the extent of the interval between these given epochs may have been there is no means of determining, nor is any assistance in fixing the time of the later occurrences to be derived from what still remains of the defaced passage, which must once have conveyed the record of a date. However, from the separate mention of the names of Chandra Gupta, Pushpa Gupta, Asoka, and his subordinate Tushasya, as well as from the circumstantial reference to the progress of the work, as first undertaken, which marks this portion of the inscription, thus much may fairly be inferred, that the record itself cannot well have been endorsed at any period distantly removed from the time of the domination of the Maurya sovereigns therein alluded to.

Among the incidental notices of importance to be found in the inscription is to be cited the reference to the lands ruled over by Rudra Dāmā. Of these, the names of Suráshtra and Anartta, as well as the designations of the countries of the Parántas and the Nishadas, are distinctly and unequivocally legible; and from among the doubtful readings, upon which less reliance can be placed, may be quoted Abhira, Khumara¹, Kukura, and the districts on the confines of Avanti (Ujein).

The sentence, "Having (twice?) conquered without deceit Satakarni, sovereign of the South" (दक्षिणपथ), likewise offers matter for remark, as, from the distinct mention of the name and kingdom of the monarch in question, a legitimate expectation might arise of the

¹ This word is exceedingly doubtful in the Bombay facsimile, the initial letter occurring after a lengthened break in the context caused by the nearly entire loss of a number of letters on the edge of a fissure in the rock. The head lines of both the first and second letters of the word suggested are also only imperfectly visible.

possibility of checking the apparent date of the conqueror by the approximate identification of that of the individual conquered; in point of fact, however, even were it possible to select the king alluded to from among the rest of his race¹, who are all supposed to have borne the dynastic title of Satakarni², but little could be gained from this source, as the known history of the dynasty itself affords still less of *certain* epochal data than that of the race whose æra we would test by their contemporaneous existence. It has been remarked, both by Prinsep and Wilson, that perhaps the most trustworthy information we obtain of the probable date of these Southern kings is derived from Pliny, who mentions that the Andhra monarchs were very powerful in India in the beginning of the Christian æra. From the details given of the extent of this power, as evidenced in the numerical strength of their armies, &c.³, it might reasonably be concluded, in the absence of any evidence to the contrary, that such extensive supremacy must have taken some time to consolidate⁴, and hence that the family of the Satakarnis may well have been co-existent with our Suráshtran monarchs, at all events at some proximate period B.C.

For the purposes of chronological arrangement, it would also be highly desirable to have been able definitively to determine the position Rudra Dámá should occupy among the other members of the Sáh Dynasty. This might possibly have been done, but with the necessary reservation in regard to the additional prefix of Swámí, by identifying the Rája Mahá Kshatrapa Rudra Dámá of the inscription with the individual of the same title and name who figures on the coins as the father of the last monarch of the present list. There is, however, undoubtedly a difficulty⁵ in the way of the unreserved ad-

¹ In number 30 kings, supposed to spread over 435 odd years. Wilson, Vishnu Purána.

² Prinsep, J. A. S. B., vii. 346; Wilson, Vishnu Purána, 474, note 63.

³ Validior deinde gens Andaræ, plurimis vicis, xxx oppidis quæ muris turribusque muniuntur, regi præbet peditum cœ, equitum m m, elephantos m. Pliny, Hist. Nat., vi. 19.

⁴ Wilson, though he says, "According to the computation hazarded above from our text, the race of Andhra kings should not commence till about twenty years B.C., which would agree with Pliny's notice of them," adds the important admission, "but it is possible that they existed earlier in the south of India, although they established their authority in Magadha only in the first centuries of the Christian æra." Vishnu Purána, p. 475.

⁵ This objection might certainly be overruled by supposing that Swámí Rudra Sáh, the son of Swámí Rudra Dámá, upon whose coins alone the latter name occurs, finding it advisable to distinguish, by some means or other, his own name—already so common in the family—from the analogous designations of his predecessors, adopted the expedient of carrying out this object by the introduction of

mission of this identity in the use of the extra title of *Swámí* on the coins, for the insertion of which there was clearly no want of room on the face of the rock whereon the inscription is engraved; and without such a convincing degree of certainty, it would of course be useless to raise up any arguments founded upon what may eventually prove a mere chance coincidence.

In concluding these summary observations on the *Sáh* Inscription, it will be useful to cite Prinsep's opinion of the internal evidence of the antiquity of the record, as shown by the form of the writing employed; an opinion, it is to be remarked, that possesses peculiar value, as having been adopted at a period, in his successful career of deciphering these monuments of antiquity, when his knowledge of the subject had arrived at its fullest maturity. "The character is only one remove from the Buddhist alphabet of *Girnár*. It has the same mode of applying the vowel marks e, a, and o, in particular to those excellent test letters n, ñ, and m. The vowel i is still formed of three dots: but I need not more fully dilate upon its peculiarities, as I have already inserted the whole alphabet as No. 3 of the comparative table," to which has been assigned the date of the third century B.C.¹

Lastly, it remains to be quoted, as a fact of some importance in the elucidation of the general subject of the comparative antiquity of Asiatic tongues, that the inscription is written in the Sanskrit language².

It is now time to notice the more prominent characteristics of the coins themselves—viewed as a series—reserving the more extended examination of individual peculiarities for the Detail appended to this Memoir.

the extra title of *Swámí*, which, in appropriating to himself, he may have thought necessary to apply to his father, though his father himself, in rejoicing in a denomination hitherto unused by any monarch of the dynasty, found no occasion to employ the same distinctive word. This title is seen from the inscription to have pertained to Chandana, the father and grandfather of these Rudras (?)—a honorary prefix by no means necessarily or invariably bestowed upon the fathers of kings. (See Varsha, coin No. 1, Detail of Coins.)


¹ "The *Sanskrit* character of the third century B.C. differs only so much from the original form [the Buddhist alphabet of the fifth century B.C.] as the habits of a class of writers, distinct in religion [?] and more refined in language, might naturally introduce." Prinsep, J. A. S. B., vii. 275.

² "All doubt as to the pre-existence of the Sanskrit in its purest state being set aside by the simultaneous production of a monument of Asoka's time, I need not trouble myself to prove the necessity of the existence of a higher and more remote model to account for the marked difference between the dialect of Guzerát and that of Cuttack. * * The dialect of *Girnár*, then [of the *Buddhist Edict*], is intermediate between Sanskrit and Páli." J. A. S. B., vii. 277.

As most readily to be disposed of, it may be convenient to commence with a description of the *Reverse*. The centre symbol of this surface of the coins uniformly consists of a base line surmounted by three semicircles, arranged in the form of a pyramid. This emblem is held—according to the circumstances under which it is employed—to typify indifferently the Buddhist Chaitya or the Mithraic flame¹. Below this is to be seen a wavy line, which has been supposed to represent a bow², but which more probably appears as the ancient type of *water*—a precisely similar line expressing that element in the hieroglyphics of Egypt. Above the apex of the centre device is a crescent, generally carefully separated from the lines of the principal figure. On the right side of the upper surface of the field is to be noticed a seeming constellation, usually numbering seven stars, one of which performs the part of centre of the system; but at times this symbol takes the form of a single sun or star, the attendant satellites being transformed into rays³. On the corresponding space to the left there is a repetition of the half-moon which crowns the centre ornament. Around these, in finely cut and mostly uniformly fashioned Devanagari letters, are inscribed the name, title, and paternity of the sovereign who struck the piece. These letters assimilate in all needful respects with the corresponding alphabet of the Sáh Inscription at Girnár, though the general coincidence is less striking in consequence of the *die*-characters being so disposed as to make the head-line of the legend nearly touch the circle that forms the margin of the coin, which has led to a very constant omission of all those vowels which should be written *above* their associate consonants.

The necessity of compressing a lengthened inscription into a limited space has also tended to vary the apparent forms of some of the letters themselves, consequent upon an effort to give the requisite definition in less than the needful breadth. This will be seen to have been more particularly the case with the letter ॐ , which is at first

¹ This symbol "occurs on the Pantaleon Greek coins—on the Indo-Scythic group—on the Behat Buddhist group—on similar coins dug up in Ceylon—and here at the extremity of India. It is the Buddhist Chaitya, the Mithraic flame—Mount Meru, Mount Aboo!" Prinsep, J. A. S. B., vi. 389.

"In the centre of the reverse is the so-called *Chaitya* symbol ; which, had it only occurred on these descendants of a Mithraic coin, I should now be inclined to designate a symbol of the holy flame, trilingual and pyramidal, of the Sassanian fire-worship." Prinsep, J. A. S. B., iv. 686.

² Stuart, J. R. A. S., xviii. 274.

³ Ar. Ant., pl. xv. fig. 14; also J. A. S. B., vii. pl. xii. fig. 12; *infra*, pl. i. fig. 19.



sight scarcely recognisable as the possible equivalent of the ☉ of the Lapidary alphabet. Another notable difference existing between the two systems of writing is, that whereas the Inscription alphabet has no tops to the letters, except such as are incidentally added to express an annexed vowel, the coin characters, on the contrary, have invariably a head line, which, though it adds to the uniform appearance of the whole, debars the free definition of these useful distinctive signs.

Reviewing the whole of the symbolic indications to be found on the reverse of the medals of the Suráshtran kings, it is to be noticed that, taking the central emblem as neutral ground, common both to Buddhists and Mithraists, there is, with the single exception of the wavy line, a remarkable absence of *other* purely Buddhist signs, in the presence, *too*, of strange symbols, which have hitherto been seen on no acknowledged Buddhist coin: moreover, these identical devices¹, the crescents, and, at times, a completely analogous form² of the star, figure as favourite devices on the avowed fire-worship coins of the Sassanians.

These considerations seem to authorise a supposition that—though already largely tinctured with the prevailing and lately dominant religion of Buddha—the Sáh kings avowedly followed the ancient faith of “Sun Worshippers,” a creed of which their country to this day bears traces, not only in its name³, but in the still surviving temples⁴ once devoted to the service of the Solar Deity.

¹ See Ar. Ant., pl. xvi. figs. 4, 6, 16, 17; pl. xvii. 1, 2, 3, 4, &c., and especially No. 7.

² Longperier, Médailles Sassanides, obverse figs. 3, 4, pl. I.; reverse figs. 2, 3, Pl. IX.; see also X., XI., &c.

³ “Saurashtra, or the region of the worshippers of the sun, comprised the whole of the peninsula at present called Kathiawar.” Wathen, J. A. S. B., iv. 482.

⁴ “The earliest objects of adoration in these regions (Méwar, &c.) were the sun and moon,” Tod, ii. 301. “The only temples of the sun I have met with are in Saurashtra,” *idem*.

It is a prominent fact connected with the survival of this form of religion that Dharapattah, the fifth Valabhi, is noticed in the text of Wathen's first Copper-plate Grant as “the great adorer of the sun.” J. A. S. B., iv. 485. In corroboration of this also, we learn from Tod that “in the mythology of the Rajpoots, of which we have a better idea from their heroic poetry than from the legends of the Brahmins, the Sun-god is the deity they are most anxious to propitiate; and in his honour they fearlessly expend their blood in battle. * * Their highest heaven is accordingly the Bhan-t'han or Bhánuloca, the region of the sun; and like the Indu-Scythic Geta, the Rajpoot warrior of the early ages sacrificed the horse in his honour, and dedicated to him the first day of the week.” (Annals, i. 563.) Hiuen-thsang found a temple of the sun at Multán in the seventh century, which was still in existence when the Arabs first entered India. (Reinaud, Analyse d'un Mémoire Géographique, 14.)

Prinsep's conjecture regarding the Buddhist faith of these monarchs was based upon three separate indications. 1st. The absence of all allusion to recognized Hindú mythology in the Gírnár Inscription; 2nd, the reading of one of the names on the coins, as Jina Dámá ("Wearing Buddha as a necklace"); and, 3rd, the Buddhistic leaning to be detected in the abstinence from destruction of life, laudatorily attributed to Rudra Dámá in the Bridge Inscription¹.

— The following observations are also illustrative of the general subject:—

"Nous en citons quelques traits dans une traduction fidèle, pour amener le tableau que nous devons faire des éléments qui ont constitué à l'origine le panthéon indien:—

"Le culte était simple [dit Goerres]: point de temples ou d'images. Les regards s'élevaient de la terre vers le ciel; là était véritablement l'empire du feu; là brûlait perpétuellement le soleil; là étincelaient les étoiles et les planètes comme autant de flammes au sein de l'obscurité; là resplendissaient dans leurs sources intarissables les feux, qui ne projetaient sur la terre que des clartés affaiblies. Le culte du feu est devenu l'adoration du soleil; le soleil, l'armée des cieux, les éléments qui leur obéissent, telles sont les puissances immortelles, et tels sont tout à-la-fois les prêtres du ciel; le monde est un reflet de la divinité; il existe par lui-même, il n'est limité par rien; en ce sens, la religion de cette époque est un panthéisme."

"Ces aperçus, qui sont pour l'histoire religieuse de l'Inde de la plus grande justesse, sont confirmés par les recherches entreprises dans les derniers temps sur les cultes dominans de l'Asie moyenne et antérieure; les débris des fables et des légendes populaires que les sources anciennes rapportent aux Chaldéens, aux Phéniciens, aux Babyloniens, aux Arméniens, aux Phrygiens, ont des caractères analogues et un fonds commun: 'Tout semble se rapporter au culte des astres ou au sabéisme, dans son sens le plus matériel. Le soleil, la lune, quelques planètes, certaines constellations, dans leurs mutuels rapports avec la terre, tels paraissent être les principaux objets d'adoration. * * La Perse, l'Egypte, la Grèce, et l'Italie même n'offrent dans leurs souvenirs antiques aucun fait qui contredise la portée de cette appréciation.'" M. Nève, *Mythe des Ribhavas*, p. 5.

"Les hommages des indigènes, à cette époque reculée, s'adressaient au soleil, à la lune, au feu, et à ce qui ordinairement frappe le plus vivement les sens et l'imagination. Tel est le culte qui parait avoir dominé jadis, non-seulement dans l'Inde, mais dans la Perse." Reinaud, *Analyse d'un Mémoire Géographique*, 13 (1846).

* See also the Vedic faith, as shown by Sir William Jones' *Essays*; Colebrooke, *As. Res.*, ix. 273; Wilson, *Introd. Vishnu Purána*, ii.

¹ "It is remarkable that, in the long string of epithets applied even to Rudra Dámá, the chosen *Satrap*, there is none which bears the slightest allusion to Hindu mythology; while, on the other hand, the coins of the whole dynasty bear an emblem we have hitherto considered either of Mithraic or of Buddhist import. The name of Jina Dámá ('Wearing Buddha as a necklace') is decidedly Buddhistic; and the epithet applied in the inscription to Rudra Dámá—who from right persuasion never put any living creature to death—proves that Rudra's opinions were at any rate influenced by the proximity of the important Buddhist establishment at Gírnár."

As it is not proposed to show that the Sâhs were Brahmanical Hindus, the first point requires neither comment nor answer: in respect to the second, as the word Jina can now be proved to have been incorrectly read in the place of Jîwa, the argument founded on the previous interpretation at once falls to the ground: and for the third position, it also is equally based on error, arising from an inaccurate rendering of the original passage in the inscription; notwithstanding all this, there is some reason to concur in the idea itself, that the Sâh kings were "influenced" by the opinions of the Buddhists, though this by no means implies a complete desertion of the old faith.

This is scarcely the place to enter into any speculations on the connexion between these religions; but as illustrative of the subject more immediately under consideration, it may be mentioned that there are numerous instances of a strange association of Buddhistic invocations with the expression of the usual homage to the sun and moon, to be found in many of the Cave Inscriptions in Western India¹.

Reverting to the *Obverse* of these medals, two prominent deficiencies have combined to obstruct any conclusive elucidation of the questions involved in the decipherment of the marginal legends—the one resulting from the use of a relatively broader die for this surface of the coin; the other, from the ignorance of the engravers of the language they endeavoured to imitate. The first of these causes has left us without a single complete *obverse* stamp, the latter has rendered that which has received a due impression—so to speak—illegible.

Before examining the legends, however, the more distinct and simple main device claims a passing notice. The head, which is seen to occupy nearly the entire surface of the coin, is remarkable in itself for a degree of perfection of outline and execution seldom attained by Indian die-cutters; and this superiority alone has been held to evidence either direct instruction in, or close imitation of, Grecian art; though the features of the face, the thin moustache, the ear-rings, and the head-dress, each and all bespeak the hand of a native artist, whose ideal of the form and apparel of a man (for whomsoever intended) was drawn from local associations. There does not seem to

¹ Sykes' Inscription, J. R. A. S., No. VIII., interpreted by Prinsep, J. A. S. B., vii. 566. See also the same, with additional Inscriptions collected by Bird, (*Historical Researches*, &c., pp. 51, 52, Bombay, 1847); also his notice of the derivation of the Buddhist religion itself, from the old form of Sabeian idolatry, *Bombay Branch J. A. S.*, May, 1844, p. 440; and *Hist. Res.*, p. 63, where he states, "I refer them rather to solar and elemental worship, out of which arose Buddhism, and with which it seems to have been intimately associated on its first propagation as a creed."

have been any intentional attempt to vary the profiles, such as under a higher style of art might have been aimed at, with a design of portraying each succeeding king; indeed, the original head is implicitly reproduced throughout, with the exception, of course, of occasional deterioration consequent upon inferiority of workmanship, which extends to the rest of the coin. The same remark applies generally to the entire execution of the die-arrangements, and it is a fact of perhaps more import than has as yet been assigned to it, that the coins of twelve kings should thus continue—throughout the period implied in the natural duration of so many reigns—to run so little changed in aught but the purport of the legends. The inscription that nearly surrounds the head, consists of two diverse, though undivided, legends, the more lengthened one being expressed in a singular imitation of Greek letters; the more brief record of three characters, which occupies the most roomy portion of the field, behind the neck of the figure, being understood to have an Indian origin. It will simplify the examination of these, to consider them each under their separate heads.

As introductory to the former, a few words seem called for on the form of the characters themselves: these have from the first been recognised as imperfect representations of Greek letters¹, and each succeeding² observer has concurred in this attribution. Late acquisitions of more perfect materials fully confirm these early impressions; and though up to the present time we are still far removed from any definite and satisfactory solution of the purport the legends may have been intended to convey, nevertheless a few items may be cited as showing progress made towards the elucidation of the enigma.

Not the least in order among these is the fact of the specimens of the earlier coins displaying far more correctly formed Greek letters than the pieces which succeed them, justifying thereby, not only the inference that the higher we advance in point of antiquity, the nearer we approach the level of the intelligible alphabet in which the earliest legends must needs have been written; but also the more important deduction therefrom, that the errors of later copyists were beyond the reach of authoritative correction, and hence, that subsequent to the establishment of the Sáh dynasty, there was, in the one case, either a general absence of Greek interference with the provinces wherein these coins were current, and that the crude imitations of their characters were considered as evincing in themselves sufficient

¹ Stuart, *J. R. A. S.*, Feb. 1837, p. 273; also Prinsep, May, 1837, *J. A. S. B.*

² Wilson, *J. R. A. S.*, 1837, p. 398; also *Ar. Ant.*, 411; Stevenson, *Bombay Asiatic Journal*, 1847.

compliance with the demands implied in the recognition of Greek supremacy; or, on the other hand—supposing the complete independence of the Sâhs of Guzerât—we must conclude that a mere mechanical semblance of the original inscription was sufficient for the purposes of the later members of the family, who perpetuated it for uniformity sake, without thinking it necessary to render intelligible a record couched in a language at best but in partial use.

That these obverse legends were mainly the work of Indian artists might be held to be sufficiently established by the simple circumstance of the Devanâgari alphabet on the reverse retaining its fixed identity throughout the series, in the presence of a progressive debasement of the associate Greek characters on the opposite surface; but beyond this, the inference in question is strikingly confirmed by the detection—at an early period—of a tendency on the part of the engraver unduly to assimilate the general features of certain Greek letters to Devanâgari characters possessed of a somewhat analogous outline. This leaning towards the local model occurs in an unusually marked degree on certain specimens of the money of the second monarch of our list, many of his coins, at the same time, showing the Greek alphabet in its initial transition state between the more correctly shaped letters of his predecessor Iswara-datta's coins, and the less and less distinctly expressed characters to be found on the pieces of his successors. Aided by the hint derived from the latter fact, the former seems in itself to furnish a satisfactory clue to the explanation of the real history of the deteriorating process whereby the obverse legends of the major portion of the entire group of these medals have reached a state of imperfection amounting to a complete loss of the distinctive character of the Hellenic alphabet. A native die-sinker, who might happen to discover the similarity that may really be said to have existed between the occasional form of his own म and the Greek ϣ, would naturally—were the idea of their correspondence once adopted, and he himself left unchecked by needful correction—go on to endue each succeeding ϣ with more and more of the identity of his own Devanâgari letter, and less and less of the required features of the—to him—foreign character; the same course applied to the Α, Δ, and Λ, each of which might be made to coincide with an inverted म, would readily account for the number of such outlines to be found in these inscriptions. Erroneous forms once introduced, and subsequent imitators possessing in turn less and less knowledge of

¹ See Pl. I, figs. 3 and 5.

the alphabet to be engraved, may well have produced the curious characters which now defy decipherment.

This may be a fit place to remark, that the earliest specimen of the coins of the Sáh kings at present known has one uniform Greek legend from beginning to end, and is entirely wanting in the Indian figures which are found on the pieces of the succeeding kings. The innovation of introducing *Sanskrit* numerals into the body of a Greek inscription seems to have originated with Rudra Sáh, the son of Swámí Jíwa Dámá. Another position is also gained from our latest numismatic contributions, resulting from the discovery, on a coin of Iswara datṭa, of a well-cut Greek sigma (Σ) of the old form, which began to be locally barbarized in India, towards the commencement of the century before Christ¹, and which is found in permanent use in its new shape (C) on the coins of Kalphises² and Kanerki. This, it is true, is but a small matter, but it should be sufficient to prove, even if there were no other evidence to the point, that the Sáh kings *preceded* the Kanerkis (Yüë Chi).

Regarding the intent and meaning of the legends, it is worse than useless to speculate upon probabilities founded upon such utterly insufficient materials as those now available³. It may be as well, therefore, to avoid all conjecture on the subject, confining the present remarks to what may be fairly affirmed as capable of obvious demonstration. Even the mutilated and clumsy attempts at Greek letters on these coins suffice to prove not only that the legends are *not* uniform, but that they vary *irregularly*; and allowing, even to the full, for incapacity and want of knowledge on the part of designers and engravers, this variation is *marked*, and apparently *purposed*. Thus, on the one hand, we find a certain given series of Greek letters reproduced on the coins of two different kings—as in the case of Vijaya Sáh, the son of Dámá Sáh, and Rudra Sáh, son of Vira Dámá⁴; on the other hand, again, are to be seen dissimilar Greek legends on different coins of one and the same Sah king⁵. These facts may be held to establish two distinct points:—1st. That the obverse inscription is *not* a Grecianized equivalent of the Indian name on the reverse,

¹ Wilson, *Ar. Ant.*, p. 316, 318, &c.

² First century A.D.: Lassen, *J. A. S. B.*, 1840, p. 765; *Ar. Ant.*, 353; Cunningham, *Num. Chron.* viii. 175.

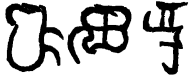



³ As it may possibly contribute something towards the eventual elucidation of the purport of these legends, it will be useful to mention that the only coin I have yet seen with the Greek legend perfect at the termination has the concluding letters distinctly . . . IYO [Rudra, son of Vira, 8th king (Sykes)].

⁴ See Detail of Coins.

⁵ Rudra Sáh, son of Jíwa Dámá. Pl. I. figs. 3, 5.

otherwise two kings of *different* Sanskrit appellations would not use the *same* Greek denomination¹: 2nd. That a *given* set of Grecian characters being interchangeable for a *different* assortment on the coins of one king, and another set remaining unchanged on the coins of two kings in succession, it is clear that, supposing the Greek legends to purport the name of any existing being, the life of the individual so named must have been independent of the duration of the lives or reigns of the Sáh princes; and hence, that the name, if name it be—and its constituent letters do not designate a Greek equivalent of the title of any of the members of the Local Pantheon—should, under each alteration, refer to some one of a succession of potentates whom it was necessary or useful for the local princes of Guzerát to acknowledge.

It remains to notice the last and most important indication afforded by these coins, namely, the dates inserted near the commencement of the Greek legend. James Prinsep was indebted, for the original discovery of the fact of the characters in question being susceptible of interpretation as *dates*, to the identification of certain numerals similar to many of the figures of the coins, detected on some Guzerát Copper-plate Grants of the fourth century [Saka?], whereon the dates were written at length in words, and repeated in figures.

The ciphers supplied by these inscriptions were 
 = 394— = 380— = 15, and 
 = 385². Prinsep had, therefore, as he supposed, the decimal num-

¹ Dr. Stevenson, in his account of the late discovery of Suráshtran coins at Junír (Pánah Collectorate), published in the Journal of the Bombay Branch of the Asiatic Society, July, 1847, acting upon the supposition that the Greek inscription might be a mere translate adaptation of the native name on the reverse surface of the coin, has endeavoured to show that the obverse legend on a piece (infra, Pl. I. 5) of Rudra Sáh, the son of Swámí Jiwa Dámá, is to be read as Διολυπις for *Deva Rudra*. Setting aside the unsatisfactory nature of both reading and rendering in this particular case, the rule itself is shown to be entirely inapplicable in its details to the later coins, and equally inconsistent with the facts developed by the change of inscription on Rudra Sáh's own coins as above noticed. I transcribe Dr. S.'s words:—"The first eight of these letters I read Διολυπις. The last with two fragments I suppose to belong to a new word of which too little remains to found any conjecture upon. If I am right in reference to the first word, it will be a tolerable translation into Greek of *Rudra*, or even of Rudra Saha, supposing Dio, as in Dionysius, &c., to be the name of Jupiter, and the other element meaning, like Rudra, the causer of grief."

² The first, second, and fourth of these sets of numerals are facsimiles taken from the original copper-plates now in the Library of the Royal Asiatic Society.

bers 1, 3, 4, 5, 8 and 9 represented by their equivalent figures. In the progress of his enquiry, he was enabled to collect no less than fifteen different symbols; the superfluous five, which remained over and above the requisite set of decimals, were imagined to be merely modifications of the correct form of the original ciphers. This excess, however, was felt and acknowledged to be a difficulty, for the solution of which it was imagined¹ there existed no sufficient data.

An extended collation of the old² and many newly acquired specimens³ of the Sáh coins has now distinctly proved that there were a separate set of symbols used to denote units, tens, and hundreds, and hence that the figures employed were incapable of acquiring local value, or attaining any accession of power from relative position; so that each by itself expressed in full its own corresponding number, independent of any numerals that might precede or follow it. Of the hundreds, the coins show but one example $\text{𑀓} = 300$. Of the tens they disclose the $\text{𑀔} = 80$, and 𑀕 or $\text{𑀖} = 90$, whose values are verified by the copper-plates, and the unidentified forms of θ^4 or γ also α , λ , σ or τ also δ , η or μ , and ϕ . The $\text{𑀗} = 10$ has been found solely on the copper-plates.

¹ Prinsep's suspicions as to the possibility of these figures being independent symbolical numerals—each representing in itself a given number, irrespective of their relative collocation—were naturally excited at finding a character, differing obviously from his own assumed figure *one*, used—in combination with a distinct unit, possessing its own separate power—to represent the value of *ten* (J. A. S. B., vii. 353). Had he seen the original Copper-plate (Grant dated 380, he would probably have been confirmed in the opinion that the series of figures in question must be wanting in local value, as the symbol which expresses 80 is here seen to stand without the succeeding dot, reproduced—we must infer—from the inaccurate facsimile furnished by Dr. Burns, as No. 2, Pl. XX., Vol. VII. If the symbol 𑀔 stood merely for 8, and not for 80, and the 𑀓 in like manner represented 3 instead of 300, the want of this dot in the *figured* date would obviously have made the combined ciphers equivalent to 38, instead of the sum of 380, as required by the context of the *written* date.

An error that must also have seriously tended to mislead Prinsep's decision of the debated question, was his mistaken reading of the figured date on one of his own coins (J. A. S. B., vii. 350, and fig. 12, pl. xii. re-engraved in the accompanying plate I. as fig. 19), wherein the symbol 𑀓 , which is in effect never found except in the third or hundred place of the date, has been quoted as occupying the second or decimal place of the date, leading naturally to the supposition that the figure was moveable, and therefore, inferentially, that the other numerals were in like manner transferable, and, as such, capable of acquiring relative value.

² Stuart's collection, James Prinsep's Cabinet, British Museum, &c.

³ Colonel Sykes, Colonel Wynch, Baron de Berh, &c.

⁴ See also Wathen's Guzerát Copper-plate, *figured* date 𑀓𑀔 . J. A. S. B., iv. pl. xl.

The unit numerals to be traced on the coins are nine in number—
 —, =, ≡, 4 or ५ also ३ = 4, ४ = 5, ६, ७ or ८, ९ or १, २ or ३,
 and ४ or ५.

As it will be seen that there is no conclusive evidence whereby to determine the correct order of succession¹ of the several princes of the Sáh family, and as it is upon such data alone that the principal conclusions regarding the numerical value of the different figures would have to depend, it may be as well to reserve any attempt at a detail verification of the import of the more doubtful symbols, and to rest content with certain palpable general inferences, which, however, will be found fully sufficient for all purposes of Dynastical *emplacement*. An additional difficulty in the way of a comprehensive assignment of the order and powers of this series of figures is found in the circumstance, that, inasmuch as they are now shown to be symbolic numerals, not only is it incumbent to determine the value of the larger number of nineteen figures, at the least, instead of the anticipated ten; but in the recognition of the fact that a separate set of numerals stood for units, tens, and hundreds respectively, we are deprived of much of the advantage which might otherwise have been derived from the identification of the *ancient* as compared with the possibly assimilate *modern* form of the same ciphers, had the


¹ For instance, although the several kings are placed in a certain order, and numbered for facility of reference, there is but little authority for the distribution, which has been adopted simply as Prinsep's final arrangement (J. A. S. B., vii. 358), without any critical examination of the value of the arrangement itself, with the means of testing which we are still unprovided, as there exists neither any written list whereby to determine the relative precedence of each monarch, nor any scale completely applicable to the decision of the question of individual priority in the possibly imperfect order of succession conveyed by the coins themselves.




To show how arbitrary the collocation hitherto received may perchance prove to be, it may be noticed that, in addition to the uncertainty attendant upon the position each head of a family ought to hold in the general list, there is not only the difficulty attaching to the succession of several brothers, but the still greater obstruction existing in the fact that our list contains the names of no less than five individuals designated as sons of Rudra Sáh, and this last denomination recurs no less than three times as indicating a reigning king, each having a different progenitor. The information to be gathered from the Sanskrit superscriptions on the medals does not suffice to show to which of the three Rudras any one of the five sons of Rudra Sáh owed his birth.

It is true there are certain minor and incidental items which tend to satisfy us with portions of the entire distribution, such as the coincidence of the use of a given date on the money of father and son; but far more definite data are requisite before it would be safe to take the serial order of the monarchs as a basis for the determination of a complicated numerical system.

number of the former been confined to the ten decimal figures at present in use.



If these symbols are admitted to be figures importing dates—and in truth there is but little reason to say they are not—thirteen kings out of the entire fourteen in the present list reigned *in* the fourth century of a given era¹. This assertion may be considered as some-

¹ A consideration that undoubtedly tends to cause distrust in the conclusiveness of the decision, which assigns the value of 300 to all the known forms of the symbol , arises from the circumstance of its appearing as the unvarying representative of *the* hundreds on both the coins and inscriptions [the Multye plates, J. A. S. B., vi. 370, may possibly prove an exception to this rule], and the singular coincidence which results from the facts that, among the many dated coins now capable of citation, and the fair proportion of *figure-dated* copper-plate grants at present known, not only must each and all, under this view of the case, be dated in 300 and odd; but likewise, strange to say, the same identical hundreds as found on these different monuments must of necessity be referred to totally distinct cycles, whose initial epochs are removed from each other by an interval of some centuries at the very least.

 These observations lead naturally to the inquiry, whether, in the early stages of progressive improvement in notation, it may not have been possible that, whereas we find a striking want of variety in the outlines, and a marked absence of ingenuity in the expression of the distinctive forms, of the decimal ciphers, that so, in like manner, the changes in the definition of the different hundreds may have been in part effected by minor and subsidiary additions to a fixed symbol, as is still practised in the entire Tibetan numerical system. It will be seen that there is a palpable variation in the form and numbers of the side *spur* strokes in different examples of the figure , passing from the occasional entire omission of the mark to the use of one or two of these lines, and in some instances (No. 6, Pl. XX., Vol. VII., J. A. S. B.) the simple lower stroke is changed into a complete subjunctive curve, making in itself a second character, similar to the body of the old alphabetical letter  N. But, on the other hand, it will not fail to be remarked that there is much latitude discoverable in the expression of many of the unit figures, whose complete identity of value there is but little reason to discredit, and hence that it would be unsafe to assume a difference of power to be conveyed in the one case, by what is possibly a mere flourish, which could not be similarly claimed for a like modification in another.

In continuation of these remarks, this may be a fit place to examine—something more at large than the patience of the general reader would probably have submitted to in the text—the various coincidences tending to throw light upon the powers of the different symbols we are at present in possession of.

Passing on from the single hundred as yet found, the decimal numbers next claim attention.

 The  is a fixed quantity, whose value is determined by its use in two distinct instances in the context of the Guzerat Copper-plate Inscriptions as the corresponding equivalent of the written number *ten* (Dr. Burns' Copper-plates, Nos. 2 and 3, J. A. S. B., vii. 349): no such complicated form, or any sign at all

what startling in referring to the well ascertained average of the length of Indian reigns', thirteen of which should, under ordinary

approaching a Sanskrit double $\text{६}''$ or $\text{६}dd$, with a vowel attached, has as yet been discovered among the series of numerals developed by the coins.

म० The power of the sign $\text{म} = 80$ has also been settled definitively by the Copper-plates, on which it is seen to undergo certain alterations of outline (p. 32, *suprà*), though its integral character is subjected to no change sufficiently decided to authorize a supposition that the many similar, though slightly varied, symbols to be found on the medals, are only modifications of the regular form of the original numeral: hence, though it may be necessary to admit the sign ॠ as possibly a cursive delineation of the more formal म , yet the figures ॐ and ॡ clearly claim a separate identity: it is a singular fact in regard to the shapes of the two former symbols, that on the leaden coins (27, 28, 30, 31) the sign almost invariably (29) takes the same squarely-based outline which it assumes on the Copper-plates, whereas, on the silver money, it never appears except as ॠ .

ॢ To dispose of the proved numerals, before proceeding to the consideration of those whose value is as yet unascertained, it remains to refer to the form $\text{ॣ} = 90$, which, when analyzed, seems to offer nothing more than a duplication of the crude symbol used for the $\text{म} = 80$; in like manner, the improved ॠ is readily convertible into the higher number by the simple addition of a central cross-stroke.

॥ॡ What the values of ॐ and ॡ , supposing them to be independent numbers, may chance to be, there are no present means of deciding. The former, as most clearly developed on the better preserved coins, assumes the appearance of a Greek θ ; on some of the less perfect specimens, however, it takes the form of the old $\text{ख} kh$ of the fifth century B.C., and at times that of the modern Tibetan ྐ *one*. Again, on Wathen's Guzerát Plate (J. A. S. B., iv. 481), what may be assumed to be an identical cipher also displays much of the likeness of a cursive ख —a letter which will be seen to have undergone but little change during the interval which elapsed between the epoch of the Sáhs and that of the Valabhis.

Were the sign ॡ written perpendicularly, instead of horizontally, there would be little hesitation in pointing to its identity with the oldest known form of the letter म : the fact of the म of the more modern legends on the coins themselves appearing in a different shape to that retained by the *figure* letter, would offer no obstacle to the admission of the original derivation of the symbol from the alphabets of earlier times, as this may well have kept its fixed integrity of

¹ Tod, i. 52, "Average rate of reigns of the chief dynasties of Rajast'han," extending over 119 kings, gives "an average of 22 years for each reign;" see also Wathen, J. R. A. S., v. 346, whose original documents show rather more than 25 years for the average reign of each prince during a period of 535 years; and Elliot's Inscriptions, J. R. A. S., iv. 5, prove an average length of reign of each sovereign, during the rule of two dynasties, numbering in all 21 kings, as 17.7 years.

circumstances, be represented by a sum of more than two centuries ($13 \times 17 = 221$), instead of being compressed into less than one; but there are other circumstances that lend support to the deduction necessitated by the admission of the proposed purport of the coin dates. Among these may be classed the consideration—to which attention has already been drawn—of the almost unvarying similitude that pervades the entire suite of the Sáh coins, which, in its simple



outline quite independent of any progressive modifications the general Devanágari alphabet may in the mean time have undergone.




𑂔 Prinsep was inclined to consider this letter—the ancient 𑂔 *s*—as the repre-




sentative of the modern figure ७, the idea being advanced simply on the strength of the letter in question constituting the initial consonant of the word *sapta* (seven). The attribution is, however, clearly inadmissible, as the figure never appears in the unit place in the dates, the several series of figures composing which are now clearly seen to be wanting in local value. Its identification as the representative of 70 would be satisfactory enough were there any more certain grounds whereon to base a decisive assignment of this kind; but a degree of difficulty exists in the apparently anomalous position held by the 𑂔 on certain coins (No. 7, &c.), as compared with its seeming import on the copper-plates. If the relative priority of the coins, *inter se*, as at present arranged, is correct, and the 𑂔 is in all cases to be held to express 300, the symbol 𑂔, as it appears on these medals, must needs refer to some of the decimal numbers of the first half—if not to the earlier part of that moiety—of the century; whereas, when tested by the comparative dates on the two Guzerát *Valabhi* Plates (J. A. S. B., iv. 481, and vii. 966, and *ante* note, p. 5), and the period which it seems necessary to suppose to have elapsed between the execution of the one and the other, there is great reason to conclude that the 𑂔 in the later of these documents represents some of the higher decimals, or at least one of those that should fall into the second half of a century. Looking to these facts, I am induced to distrust the entire arrangement of the list of kings as heretofore adopted, though in the present insufficiency of materials to justify any new collocation, I hesitate to propose any alteration in the order of succession hitherto received, further than drawing attention to the principle involved in the explanation of the difficulties of the case, suggested in the text at p. 39.


The figure 𑂔, as seen on the less perfect coins, frequently assumes the appearance of the lower portion of a modern 𑂔. At first sight, this might possibly be looked upon as a different sign; but it will be seen that the mode of writing the 𑂔 in use on the coins occasionally admitted of the complete omission of the first down-stroke of the letter, though its place was in a measure supplied by the due expression of the mark which should otherwise have formed the head line of the missing stroke (See fig. 3, reverse). There is a single instance of an addition to the original type of the figure, in the continuation of the second perpendicular line of the 𑂔 in the shape of the lower limb of an 𑂔, similar to that





mechanical indication, implies a comparatively speedy sequence of fabrication, as well as the fact, also confirmatory of an inference admitting the brief duration of the series of reigns made known by our medals, developed in the occurrence, amid so limited a list of kings, of two distinct instances of a succession of three brothers. Moreover, in adverting to this last point, it is to be remembered that coins alone, in the absence of any full list of sovereigns, only prove their own case, and the medals now available by no means show that in this given

already noticed as occurring on the . Subjoined is a copy of the date containing this symbol, taken from a mutilated coin of one of the sons of Dāma Sāh—

 This symbol is seen to occupy the second place in the figured date on the leaden coins Nos. 33, 34; it occurs on the silver money of Dāma Sāh, and has also been found, in a slightly varied shape, in the same relative position, on the Bhilsa Inscription (J. A. S. B., vi. pl. XXVI.). In neither case, however, is any collateral assistance afforded in the ascertainment of the numerical value of the cipher itself. In one case, the figure may be likened to an inverted  8; in the other, it partakes more of the character of the  7 of the Gupta alphabet.




 The accompanying figure is put forward without any degree of confidence in the accuracy of the form, owing to the imperfection of the date on the coins (fig. 9, and a coin of the E. I. C.), from whence the outline has had to be copied; the more perfect medals of Dr. Bird's, whence the extra references are cited, not being at hand to aid in correcting the type now adopted. On one of Dr. Bird's specimens this figure has the extra subjunctive curve already remarked upon as occasionally seen on the  and . It will be seen that this is the only figure in the series of *tens* that could by any possibility be confounded with any of the unit ciphers, which fact in itself adds to the already expressed distrust in the completeness of the prefixed facsimile.

 I have also some misgivings as to the normal shape of the symbol represented as closely as circumstances will admit of in the type figure at the commencement of this sentence. The form occurs but seldom, and, when found, has hitherto happened to prove unusually indistinct. As now given, the outline closely approximates to the curious character employed in modern Guzerāti to represent the number *six*.

 Having thus cursorily referred to the decimal numerals, it is time to detail the unit ciphers. It will be convenient to commence with the  or  (coins 33, 34, &c.; see also copper-plate date quoted p. 4), which, amid a set of seven, if not eight, symbols already known out of the required nine, and as the only figure of the series that displays any identity with the probably purely original form of a , can scarcely be objected to as the equivalent of that number, especially as the three simple lines thus arranged to this day constitute the regular representative of 7. To give consistency to this attribution, it would be necessary to prove that the same system of equivalent numbers of simple lines, applied equally well to the definition of

interval there were not many Kshatrapa kings over and above those whose names have been handed down by these metallic records.

The most obvious method of explaining the difficulty, as it now presents itself, would be to suppose the existence of a republican form of government as that under which the Sáh family held sway; and that in the history of the nation, there were, on certain occasions, either two or more rájas simultaneously invested with a share in the conduct of the state, or, if elected as solo rulers for the time being, the

the *one* and the *two*. This may probably be shown to have been the fact, inasmuch as there is one decided instance of the use of an isolated dot or short square line after the  on one of the leaden coins, and there are several apparent examples of the occurrence of double lines in the requisite position on the silver coins, though these are not definitively quoted, as it is possible they may either be the remaining lines of a *three*, or the imperfectly defined representatives of the Greek I, or that portion of any initial letter of the succeeding legend. With all this evidence in favour of the proposed value of the double lines, it is to be noted, on the other hand, that they are frequently prefixed to the entire date, as in fig. 30, where, to all appearance, they could otherwise serve no possible purpose but that of an ornamental filling in of vacant space, unless, indeed, they are here to be understood as an imperfect rendering of the corresponding opening mark, which invariably precedes the date in the form of a Greek I on the silver coins, and that introduced originally upon the leaden pieces, in uniformity with the practice on the silver series, they were arbitrarily supplied or omitted at the will of the die-sinkers. There are no less than five very clear examples of the use of these prefix dots, and were it not for the knowledge gained from fig. 30, where it is impossible the sign could import *two*, a supposition might have arisen that, in the case of the *very* legible date =   on a leaden coin of Colonel Sykes', the figures employed might be intended to convey the number 382; but it will be seen in this, as in every other example of the use of these symbols, that, although wanting in local value, they are uniformly placed in the order in which they should be read.



Weighing the whole evidence on the subject, and the fact of the *one* and the *three* having been found in the needfully corresponding forms, there can be but little objection to adopting the *two* as designed by the two lines, when clearly defined, which succeed any decimal figure, notwithstanding the occasional appearance of a similar form as an, at present, inexplicable prefix to dates counting by hundreds.





4 The ५, ३, ४ of the coins, or ५ = 4 of the copper-plates, may be fairly admitted to a common identity, and, as such, may each and all be invested with the value assigned to the last by the formal testimony of the Copper-plate *Grant* in the body of which it occurs.


The coin characters are seen to vary in some of the subsidiary and minor details, such as has already formed the subject of remark in the cases of the ३ and ५. In the present instance, the additions would seem to have been fanciful in the extreme, and to have been added or withheld in the most arbitrary and undetermined manner.




५ The ५ five of the copper-plates, which themselves prove its value, may




periods of retention of authority were limited directly and definitively by law, or terminable irregularly at the will of the majority: in either case it will be necessary to allow for the influence of a degree of prestige or direct power attaching to the particular family for the moment most prominent, which has led to the election of so many sons of rajas.



possibly be the more modern correspondent of the  of the coins: the latter symbol occurs but rarely, and the accuracy of its form, as at present given, cannot be altogether relied upon, as the only examples of its use within reach (two coins of Atri Dāma, severally the property of Colonel Sykes and Dr. Swiney) offer the figure in its probably incomplete shape, deprived of any upper line that may perchance have constituted an important portion of the integral form. The Guzerāṭī *four* of the present day bears a close resemblance to the coin figure; but as the Guzerāṭī modern numeral series does not tally with any possible assimilate system as applicable to the units of the more ancient epoch, it is but little use citing these coincidences, though as it is possible that literal identities may be of more import in their bearings upon the general inquiry, it may be noted that the same character as that now found on the coins is in current use as the  of the modern Sindhī alphabet.

 This sign offers an accurate model of the Bengālī  *d*. Among the earlier alphabets it might answer for a Gupta . The Tibetan  corresponds in many respects with the outline of this figure.

 These two symbols—the one from a silver, the other from a leaden coin—have been classed together for the present, owing to the uncertainty which of necessity remains of the true form of the single example that presents itself on the silver money, from its being apparently deficient in the upper part of the character.

 This symbol is an exact counterpart of the  *ng* of the Sāhi Inscriptions; whether from its striking similitude to the common modern Sanskrit  8, it may be judged to have any claim to be considered as the ancient equivalent of that number must for the present remain an open question.

 This cipher may be likened to a  *ṣ*, or possibly to a  *ṣh*. There is but one instance of its use (fig. 31, pl. II.), and this occurs on an extensively oxydised leaden coin; so that there may be some doubt about its correct outline, as well as whether it may not be a variety of the preceding symbol.

 There is no question as to the accuracy of these forms *per se*, as they are found clearly defined on several well-preserved coins. Whether they are correctly classed as varieties of the same figure may be permitted for the present to remain an open question, as the correct ascertainment of their shape can scarcely be said to assist in the identification of their value and import. The figure placed first in order is a very close counterpart of a Sanskrit  *ru* of the type in use in the Sāhi alphabet; the second figure is also fairly recognisable as a crudely-shaped compound of similar value.

It must be admitted, however, that though there are numerous instances capable of citation¹ as proving generally the prevalence of republican systems of government among the people of India in these ancient days, there is at this moment but insufficient evidence² to authorise the application of any theory, implying popular government, to the peninsula of Guzerát during the time of the Sâhs.

It is now necessary to determine to what æra these dates should be held to refer. J. Prinsep, in his latest paper on the subject, after discussing the claims of several possible æras³, goes on to say—"If,

¹ There is evidence sufficient to the fact of the existence of republics in India in early times, though but few distinct details are extant as to their exact forms of constitution. The republic of which most frequent mention is made is that of Vaisâli, which is repeatedly referred to in the *Dulva*, and casual indications are afforded of the powers possessed by the citizens in the time of Shakya (Csoma de Koros, *As. Res.*, xx. 66, 72). Some curious information on the general subject is also conveyed in the following passage from Csoma de Koros' *Analysis* of this work (*As. Res.*, xx. 69):—

"The story of Dumbu, a Minister (of State), and his King, Hphags-skyes-po, in Lus-Hp'hags (*Sanskrit* Vidêha). Dumbu escapes to Yangs-pa-chan [Vaisâli], and settles there. He first declines to give his advice in the assembly of the people there, but afterwards renders them great service by his prudent counsel."
* * * "The before mentioned Dumbu is made chief tribune there, and after his death his second son. His elder son retires to Râjagriha, in Magadha."

Further notices of the republic of Vaisâli are to be found in "Foe Koue Ki," from which the following may be cited as throwing light on the interesting question of the government of these bodies—"Il s'agit ici des habitants de la ville de *Phi che li* (Vaisâli), lesquels formaient une république, et s'appelaient en Sanscrit *Litchtchiwi*, ou *Litchhe* dans la transcription Chinoise. *Tchu Li tchhe* signifie donc tous les *Litchtchiwi*, ou la réunion des *Li tchhe*" (Klaproth, p. 240). Again (Klaproth, note 8, *Les deux rois*, p. 251), "Il paraît que quoique les habitants de Vaisâli eussent une forme de gouvernement républicaine, ils avaient pourtant aussi un roi. Les deux rois de notre texte sont donc *A tche chi* de Magadha, et celui qui était le chef de l'état des *Li tchhe* ou *Litchtchiwi* de Vaisâli."

Arrian may likewise be quoted to show that self-government was by no means unusual in India in his day, as the *Episcopi* are mentioned as bound to report "to the king in those places where the Indians are under regal rule; or to the *Magistrates*, where they govern themselves." (*Indicæ*, cap. xii., cited by Prinsep, *J. A. S. B.*, vii. 449).

* * It may be requisite perhaps to notice that the following passage in Prinsep's Translation of the Bridge Inscription is not borne out by the more perfect copy of the original in the Bombay Journal:—" * * * by him [Swami Rudra dama] who, being predestined from the womb to the unceasing and increasing possessions of the fortunes of royakya, was invited by all classes waiting upon him for the security of their property—*ta be their king*."

³ The claims of the Seleucidan Æra (1st Sept., 312 B.C.) to be considered as the cycle in use under the government of the Sâh kings, are by no means to be lightly passed over, if we bear in mind on the one hand the possible subjection to Greek supremacy implied by the superscription of that language on the local coins,

lastly, out of deference to Asoka's temporary supremacy in the Gu-

and on the other the care with which the recognition of this era was enforced in the provinces more directly subject to the Seleucidan rule, as we learn that it was "used all over the East by the Jews, Christians, and Mohammedans. The Jews still style it the *Æra of Contracts*, because they were obliged, when subject to the Syro-Macedonian princes, to express it in all their contracts and civil writings," Gough, Seleu., 3. "In Maccabees, i. 10, it is called the *Æra of the Kingdom of the Greeks*," Gough, 4.

In connexion with this subject, some further items suggest themselves, bearing upon the interesting question, as to how much of the Indian system of cipher notation was derived from, or improved by communication with the Greeks. Although so debatable a point requires more examination and argument to serve to justify a definite opinion, than either the materials or the space at command will at present afford, still the subjoined remarks may not be inappropriate as introducing the matter to the attention of others.

In the first place, it has already been noticed as singular that these Indian dates should be found on the coins in direct conjunction with, perhaps absolute insertion in a Greek legend, instead of taking their place in their more natural position, among the Sanskrit legends and local devices, on the reverse surface of the pieces.

Next is to be observed the complete absence of any previous example of the use of figures to express numbers on any known Indian inscription, or on any coins of that country which there is reason to assign to an earlier epoch.

And, lastly, there is the less negative argument, against the probability of any general anterior use of ciphers, in the fact, only lately brought to light, that whatever means of representing quantities by symbols may have been in associate use with the Indian Palī alphabet, the Bactrian Palī of Asoka's time, as seen on the Kapūr di Giri Rock Inscription, possessed no figure equivalents of numbers, but the required sum was first *written*, and then numerically expressed by a corresponding succession of simple perpendicular strokes. It is true that this position may have to be somewhat qualified, inasmuch as up to this time we are able to cite only the early number *four*; and it is possible that the higher numerical equivalents may, in the necessity of the case, have been subjected to a more perfect system, as is seen to have occurred in the Cuneiform Inscriptions, where the low numbers were often defined by little more than rude combinations of the equivalent number of simple strokes, while the decimals and hundreds were far less crudely rendered. Rawlinson, J. R. A. S., x. 172; Hincks, *idem*, ix. 423.

In addition to this, were any faith to be placed in similarity of characters, many of the numerical symbols might be identified as possibly of Greek derivation; for instance, the \oplus is the exact form of the Greek Θ of the Sigeian (500 and odd B.C.) and Apollonian (a few years B.C.) alphabets; but so also is the Indian cipher \ominus recognizable as a Greek Θ , as indeed the Palī \odot itself is absolutely identical with the Θ of the Nemean and Athenian forms of the same letter. The Indian \equiv approaches closely to the outline of the Greek Ξ of Cadmus, and of the Sigeian characters. The coin figure Ω is likewise a perfect rendering of the Attic Ω (400 B.C.). (See Fry's *Pantographia*.)

Amid all this, on the other hand it is amply manifest that whatever of enlarged ideas of arrangement and distribution of numerals the Indians may perchance have owed to the Greeks, they did not generally adopt their letters, or even their literal equivalent system, as modified to suit their own alphabet; and judging

zerát peninsula, we take the Buddhist æra, then 543 — 390¹ will leave 153 B.C., about a century after Asoka, and in every respect the period I should like to adopt, were it possible to establish any more certain grounds for its preference². In addition to the limited confidence in the value of his theory expressed by the proposer himself, there are further objections to its reception that appear to have escaped his observation. In the first place, as regards any probable deference to Asoka's supremacy, Prinsep himself had already remarked, in his comments upon the Sáh Inscription, which formed the main subject of the article, whence the above extract is taken, that "the brahmanical population of the distant province of Surashtra probably had but little affection for the Buddhist monarch, who is not even honoured in the inscription with the title of rája—being simply styled *Asoka the Maurya*!" This passage in itself seems to refute sufficiently any notion which would imply needless adoption or continued use of a strange æra, introduced, as assumed, in the first instance, by a monarch whose memory is here seen to be treated with such scant respect. In the second place, whatever may have been the amount of actual currency of the Buddhist Æra itself, the probability of its *monumental* employment on the coins of the Sáh king is weightily controverted by the fact, that it was not so used on the monuments of the Buddhist kings themselves—(*Piyadasi*⁴) Asoka's own inscriptions being invariably dated in the years of *his* reign⁵ (or "after *his* consecration").

The æra it is now proposed to apply to the coin dates, in supersession of the Buddhist cycle, is entitled the *Srí Harsha*, the very existence of which, as a cycle, has only lately been made known to Orientalists, through the medium of the publication of a portion

from the strictly Indian forms retained by some of the *literal* figures, now seen to have been in use under the Sáh of Guzerát, it is almost necessary to infer that the original outlines of the figures themselves were either drawn from an anterior Sanskrit or else from a more purely Páli alphabet than that concurrently employed in ordinary writing, the admission of which fact in itself goes far to demand a consequent concession that the Indians were not indebted to the Greeks for any assistance in the matter.

¹ Date on a coin of Swámí Rudra Sáh, the 14th prince in the *present* list.

² J. A. S. B., vii. 354.

³ J. A. S. B., vii. 343.

⁴ It is necessary to state that the identity of Piyadasi and Asoka has not remained unquestioned (see Wilson, J. R. A. S., viii. 309; Troyer, Radja Tarangini, ii. 313), though the arguments as yet adduced to shake faith in the fact are scarcely sufficient to meet the various concurring proofs to which they are opposed (see, on the other hand, Lassen, J. A. S. B., 1840, p. 751).

⁵ J. A. S. B., vii. 220.

of the valuable works of Albîrûnî relating to India. The extracts appended below¹ sufficiently detail the history of the Sri Harsha Æra; all that need be said in this place is, that as its commencement dates 457 B.C., the epoch of the Sâhs at present constituting our list,

¹ "On emploie ordinairement les ères de Sri Harscha, de Vikramaditya, de Saca, de Ballaba, et des Gouptas."

"Les Indiens croient que Sri-Harscha faisait fouiller la terre, et cherchait ce qui pouvait se trouver dans le sol, en fait d'anciens trésors et de richesses enfouies; il faisait enlever ces richesses, et pouvait, par ce moyen, s'abstenir de fouler ses sujets. Son ère est mise en usage à Mahourah, et dans la province de Canoge. J'ai entendu dire à un homme du pays que, de cette ère à celle de Vikramaditya, on comptait quatre cents ans; mais j'ai vu, dans l'almanach de Cachemire, cette ère reculée après celle de Vikramaditya de 664 ans. Il m'est donc venu des doutes que je n'ai pas trouvé moyen de résoudre * * ." Albîrûnî, Reinaud, p. 139.

Again—"L'ère des astronomes commence l'an 587 de l'ère de Saca (665 A.D.). C'est à cette ère qu'ont été rapportées les tables Kanda khâtaca, de Brahmagupta. Cet ouvrage porte chez nous le titre de Arcand. D'après cela, en s'en tenant à l'an 400 de l'ère de Yezderdjed, on se trouve sous l'année 1488 de l'ère de Sri-Harscha" [457 B.C.]. Ibid, 143, 144.

The difficulty noticed in the first of these extracts seems capable of explanation by the fact that in the year 607 A.D., or 664 Vikramaditya, an important revolution occurred on the occasion of the death of *Harsha Vardhana*, of Kanouj, which may possibly have given rise to the *second* Sri Harsha Æra of the Kashmir Almanack. M. Reinaud has the following remarks upon the changes which took place on the decease of Harsha Vardhana:—

"L'an 607 de notre ère, une révolution fit déchoir la ville de Canoge du haut rang qu'elle occupait. Cette révolution eut lieu à la mort du roi Harscha-Vardhana, dont le père se nommait Prakara-Vardhana, et dont on avait jusqu'ici fait descendre le règne jusqu'au XI^e siècle. La population de l'Hindostan actuel se partageait en brahmanistes et bouddhistes. Harscha, partisan zélé des bouddhistes, suscita des embarras aux brahmanistes; en même temps il fut forcé, par suite de ses profusions, d'augmenter les impôts, ce qui mécontenta le reste de ses sujets. Harscha, étant mort, son fils aîné, Karadja-Vardhana, fut attaqué par un prince ami des brahmanistes, et tué par trahison. Le frère de Karadja, nommé Siladitya, eut beaucoup de peine à se mettre en possession du trône de ses ancêtres; les princes feudataires se soulevèrent; Siladitya fut obligé de renoncer au titre de maha-radja ou grand-radja, et l'unité politique fut à jamais rompue." Analyse d'un Mem. Géog., p. 20; also Géog. d'Aboulféda (Traductica), i. 337.

This solution of the difficulty—in making a second Sri Harsha Æra—also removes an important objection to the application of the first Sri Harsha Cycle—as confounded in Albîrûnî's observations—to *Guzerât* dates: inasmuch as the local use of the æra noticed in the Arabic text must now be held to refer to the epoch derived from that one of the two Harshas who lived nearest to Albîrûnî's own time. This latter cycle would moreover possess peculiar claims to local currency in Kanouj, &c., which could hardly have been demanded for an æra, even then so much a matter of antiquity, and so little known its details, as the original Sri Harsha, commencing 457 B.C.

reduced by this test, may be broadly stated to fall from about 180 or 170 to 60 or 50 B.C.¹

Beyond this evidence, there is little left but conjecture, though it is satisfactory to find that there is *no* direct testimony or admitted inference in any way adverse to the reception of the epoch now assigned to the Sáh princes.

It is known that Asoka's empire of Magadha did not survive in its pristine glory any very lengthened period beyond his decease²; and the tenor of the Sáh Inscription, while it clearly recognises Asoka's bygone supremacy in the province of Guzerát, claims for its own kings no very remote succession to this local power—with the requirements of this portion of the question the coin dates, explained as referring to Anno Harshæ, in all respects coincide.

It is generally held that Demetrius³ invaded India some time closely anterior to, if not contemporaneously with, the date above suggested as that of the establishment of the Sáh Dynasty in Guzerát; but it is nowhere shown to what limit either his arms or his permanent dominion extended: the fact of his possession of supremacy on the lower Indus, if decided upon, would lead readily to the suspicion that the Greek upon the Sáh coins might in some measure be due to this influence, and that in attaining their leading position in the Western Peninsula, these princes affected a Greek alliance, and perhaps accepted subjection, nominal or real, as a set-off against the still considerable power of their former Indian masters. Be this as it may, the historical evidence bearing upon the point in question, if it will not explain any of our present difficulties, can in no way be said to augment them.

The trenching upon the limits of the sovereignty assigned to Menander⁴,—who must now be viewed as contemporary with the earlier Sáh,—is perhaps more open to objection, as Prinsep and Lassen both determine that he possessed Surashtra⁵; the appropriation, how-

¹ Dated coins of eleven princes, proving the existence of thirteen kings all within 300 to 400 Ann. Harshæ (= 157 to 57 B.C.), and one, if not more than one king preceding them.

² 219 B.C., Buddhist Annals; Lassen, J. A. S. B., 1840, 752; 232 B.C., Cunningham, Num. Chr., viii. 175.

³ Lassen, 185 B.C., J. A. S. B., 1840; Wilson, 190 B.C., Ar. Ant., 227; H. T. Prinsep, 190 B.C., Historical Results, p. 54.

⁴ Lassen, 160 B.C., J. A. S. B., 1840, p. 765; Wilson, 126 B.C., Ar. Ant., 280; Cunningham, 160 B.C. to 136 B.C., Num. Chr., viii. 175.

⁵ J. A. S. B., vi. 290; Lassen, J. A. S. B., 1840, p. 733. Cunningham, (Num. Chr., viii. 193,) has the following observations on the subject of Apollodotus' possessions in these parts. It is to be premised that Capt. Cunningham places

ever, rests upon a doubtful text and an amended reading, and the inference has not been altogether concurred in by Professor Wilson'. The supposition of a recognition of Greek suzerainty by the local rulers of Guzerát perhaps sufficiently meets the wants of either one case or the other; but if we are to admit to the full the claims to Indian sovereignty advanced by Rudra Dámá, in his Gírnár Inscription, and to hold him to have reigned towards the conclusion of the third century Anno Harshae, he, or some of the preceding members of the Sáh family, must have shared with the *Su Sakas*² the succession to the dominions heretofore assigned to Menander, to an extent much beyond the bounds of the bare peninsula of Guzerát.

More importance than seems justly its due has been attributed to the fact of Menander's coins having been found current at Baroach³ on the occasion of the visit of the second Arrian. Had the epoch spoken to been nearer the date of the rule of the Greek king, the locality, to which the observation refers, less remote from the seat⁴ of his government, Baroach less important as the western emporium of the trade of Central India, or the produce of Menander's prolific mints less abundant in other quarters, more credit might have been conceded to the deduction attempted to be established from the circumstance. As it is, it proves nothing as to the local sovereignty of Guzerát of two centuries before⁵, more especially as its real origin has now been ex-

Apollodotus' accession in 165 B.C., and makes Menander succeed to certain portions of his dominions in 160 B.C.

"This monogram Σ I have found only upon a single coin of Apollodotus. It forms the syllable OY Σ , possibly OY Σ H Σ H, the city of Ujain, which we know has existed from a very early period. I believe that Patalene and Syrastrae formed part of the dominions of Demetrius, which were wrested from him by Eueratides during his Indian campaign. It is possible also that some part of the province of Lariké was subdued by the Greeks; and I should certainly not be surprised to find this monogram on the coins of Demetrius and Eueratides. Apollodotus may very probably have succeeded to the possession of these southern conquests, but he could only have held them for a very short time."

¹ "Upon examining the coins, however, of this prince, we have every reason to believe that he never was king of Bactria, but that he reigned over an extensive tract, from the foot of the Paropamisian Mountains to the sea. How far he held sovereignty on the east of the Indus, or even in the delta of that river, is somewhat doubtful, as his coins have not been found in those directions." Ar. Ant., 281.

² Cunningham, Num. Chr., viii. (Table); Ar. Ant., 313; Lassen, J. A. S. B., 1840, 765.

³ Lassen, J. A. S. B., 1840, p. 733; Wilson, Ar. Ant., 280.

⁴ "Kabul, and here was in all probability the royal capital of Menander." Ar. Ant., 281.

⁵ Vincent had already shown the real value of the fact in his observations to

plained by Professor Wilson¹, viz., that the Greek silver money was [intentionally] retained in circulation by the Indo-Scythians, in concurrent association with their own gold coinage.

In bringing these observations to a close, it may be expedient to recapitulate in a tabular summary the principal dates proposed for adoption; and, while quoting definitively the more prominent fixed epochs, to avoid any aim at exactitude of subordinate detail, and rest content with indicating generally the relative position the various races, dominant in Guzerát during the several intervals, are supposed to have occupied.

the following effect:—"That the coins of these princes should pass current at Barugáza is no more uncommon than that the Venetian sequin and the Imperial dollar should be at this day current in Arabia, or that the Spanish piastre should pass in every part of India and the East; that is, round the world, from Mexico to Manilla, and in some instances, perhaps from Manilla to Mexico again." Vincent, Commerce, &c., ii. 204.

¹ Ar. Ant., p. 348.

LIST OF DATES REFERRING TO GUZERAT,

WITH THE DYNASTIES INTERVENING BETWEEN THE SEVERAL FIXED EPOCHS.

CHANDRA GUPTA MAURYA 315 B.C.¹

ASOKA 247 B.C.²

One or more SAH KINGS.

Thirteen SAH KINGS. All	{	from 157 B.C.
date in the fourth century of		
what may be assumed to re-		
fer to the Sri Harsha Æra,		
457 B.C.	}	to 57 B.C.

INDO-SCYTHIC CONQUEST 26 B.C.

GUPTAS.

VALABHI ÆRA commences 319 A.D.

¹ Wilson, Vishnu Purāna, pp. 468, 469, note 21; see also *Introduct.*, Hindu Theatre, iii.

² Turnour, "Mahawanso;" but taking Wilson's fixed date of 315 B.C. for Chandra Gupta's accession, and accepting the Purānic evidence of the length of Chandra Gupta's and Vindusara's reigns at 24 and 25 years respectively, Asoka's accession will fall in 266 B.C.: the Purānas give him a reign of 36 years.

LIST OF KINGS.

-
- 1 ISWARA DATTA, Son of Varsha.
 - 2 RUDRA SAH (SINHA?) I., Son of Swámí Jíwa Dámá.
 - 3 AṢA DAMA, Son of Rudra Sáh. (No. 2.)
 - 4 DAMA SAH, Ditto.
 - 5 VIJAYA SAH, Son of Dámá Sáh.
 - 6 VIRA DAMA, Ditto.
 - 7 DAMA JATA SRIYAH, Ditto.
 - 8 RUDRA SAH II., Son of Víra Dámá. (No. 6.)
 - 9 VISWA SINHA, Son of Rudra Sáh. (No. 8.)
 - 10 RUDRA SAH III., Ditto.
 - 11 ATRI DAMA, Ditto.
 - 12 VISWA SAH, Son of Atri Dámá. (No. 11.)
 - 13 SWAMI RUDRA DAMA. (No Coins.)
 - 14 SWAMI RUDRA SAH IV., Son of Swámí Rudra Dámá.
-

DETAIL OF THE COINS.

1ST KING.

ISWARA-DATTA.

Figures—1 (E. I. C.), 2 (Wynch), Plate I.; and No. 1, Plate II.¹

OBV. *Bust of a man, facing to the right, with a flat cap or helmet²; the hair is arranged in flowing curls over the back of the neck, a long thin mustache decorates the upper lip, and a curiously-formed ornament depends from the ear; around the neck is seen the border of the robe, and towards the margin of the piece, encircling the entire head, is inscribed a legend, which in the coins of this prince is exclusively composed of Greek letters. Prominent among those on fig. 1 is to be noticed the lower portion of a clear well-cut sigma.*

It will be seen, from the specimens of the coins of the succeeding rulers, that an innovation was almost immediately effected in the contents and arrangement of the obverse legend, as found on the money of Iswara-datta, inasmuch as towards the commencement of the Greek legend a set of three ciphers are hereafter invariably inserted, which are supposed to convey the record of an Indian date.

REV. The central symbol consists of a series of three semicircles arranged in the form of a pyramid; this emblem is recognisable either as the Buddhist Chaitya, or the Mithraic flame; below is a wavy line, which it is not unreasonable to identify with a similar Egyptian hieroglyphic symbol employed to denote *water*; above the central device is a figure, in the shape of a half moon, which is repeated on the left of the field, and in the corresponding space to the right is found a cluster of stars, usually seven in number, one of which occupies the centre of the constellation; at times this stellar assemblage is resolved into a single rayed star or sun. Nearly touching the marginal line, which forms the outer circle of the field—expressed in admirably designed Devanāgarī letters—is inscribed the following legend—



राज्ञो महा क्षत्रपस ईश्वर दत्तस वर्ष पुथ—

*Rājno Mahā Kshatrapasa Iswara-dattasa Varsha putha**

¹ The average weight obtained from forty-seven specimens of these silver coins, taken at random from the entire series, gives a return of 30·4 grains. There are several examples of a full weight of 35 grains.

² Possibly a native adaptation of the Macedonian *Kausia*, which is seen to have been a favourite head-dress among the Bactrian Greeks; but judging from the rest of the subsidiary indications, it is likely to have had a more local origin.

Dr. Stevenson proposed to read the name of the father of this prince as *Bala*—a guess that was hardly justified by the characters remaining on the piece he quotes in support of his assumption (fig. 2); but the clear letters on Colonel Wynch's coin completely set the question at rest that the true designation is *Varsha*.

Among the peculiarities to be noted in the legend is the use of the long vowel  in the initial or complete form of the letter; the initial long  .j. has not been found on the associate Girnar Rock Inscription, or among any of the anterior Pali alphabets; but a letter identical with the coin character is seen in full currency both on the Gupta Girnar monument, and on the succeeding Guzerat dated plates it would perhaps be inferred from these data, that a more modern epoch should be assigned to the coins bearing this letter than to the Bridge Inscription, which has hitherto been assumed as nearly contemporary. It would not, however, be safe to rely upon this argument, except as auxiliary to more distinct proofs, as at best it is but based on a negative fact, which may merely imply absence of occasion to use such a character in the Rock Records; moreover, there has already been reason to notice the general superiority and at times important changes that mark the mint letters in reference to their Lapidary equivalents—a distinction that has also been the subject of remark in respect to a sister alphabet—the Bactrian Pali¹—wherein much greater perfection of outline was attained in the monumental writing in use on medals than in the corresponding engraving on Rocks.

But as the sovereign, by whose command the Girnar Bridge Inscription was executed, is still unidentified with any individual of whom we possess money, any detailed discussion of this subject would be comparatively useless, until it is determined whether it is desirable to place the king named in the inscription *before, among, or after* the series of princes known only from coins.

It will be observed that the word *Putha* differs from the term employed on the coins of the other monarchs, in the use of the Zend *th* instead of the usual Sanskrit *tr*.

¹ Lassen, J. A. S. B., 1840, 368; Cunningham, J. A. S. B., 1840, 430.

2ND KING.

RUDRA SAH, SON OF JIWA DAMA.

. Figures—3 (Prinsep), 4 (R. A. S.), 5 (E. I. C.), Plate I.; No. 2, Plate III.

OBV. Head as usual. No. 3, figures ॐ ॐ ? ; imperfect legend IAVOYTAIA . No. 4, ॐ ॐ ॐ . No. 5, figures illegible; imperfect Greek legend ΔΙΟΝΥΣΙΟΥ (a possible corruption of ΔΙΟΝΥΣΙΟΥ).

REV. Symbols as usual. Legend—

राज्ञः क्षत्रपस रुद्र सहस स्वामी जीव दामा पुत्रस .
Rājnah Kshatrapasa Rudra sahasa Swāmī Jiwa Dāma putrasa.

The initial letter of Swāmī is sometimes written श् instead of स् , and the short इ is used in both Swāmī and Jiwa in place of the long one, ई . This last name has hitherto been read as Jina जिन , but the more perfect coins now engraved prove clearly that the word is *Jiwa जीव*.

On one coin of this king (Prinsep) is to be seen a very distinct इ inscribed over the first स , of what has hitherto been read as साह *Sáha*, but which should probably now be received as सिंह *Sinha*.

3RD KING.

AŚA DAMA.

Figures—6 (E. I. C.), 7 (Steuart), 8 (Steuart), Plate I.; No. 3, Plate III.¹

OBV. Head as usual. Fig. 6, legend illegible. Fig. 7, ॐ ॐ . Dr. Bird has three of this king's coins with the decimal ॐ after the ॐ .

REV. Symbols as usual. Legend—

राज्ञः क्षत्रपस आशा दामः राज्ञः क्षत्रपस रुद्र साह पुत्रस
Rājnah Kshatrapasa Aśa Dāmah Rājnah Kshatrapasa Rudra Sāha putrasa.

¹ There is a king of this name among the Bactrian Greeks, made known to us by his coins, which in their types seem to connect him with Apollodotus.

The name of this monarch has heretofore been rendered as **अग दामा** Aga Dámá, the small central stroke in the second letter of the king's name having escaped the eye of Mr. Steuart's Italian engraver, from whose plates alone Prinsep deciphered the legends on the coins of this prince. The reading now proposed—involving the acceptance of the character **𑀓** as the equivalent of the modern **श**—may be readily justified by a reference to the current forms of the old letter, either on the coins, or on inscriptions of a closely subsequent date, though it is freely to be admitted that the outline of the letter itself was by no means fixed or immutable, inasmuch as it is seen to occur as **𑀓** (coins of 1st and 7th kings), **𑀓** (figs. 15, 16, and 23), and as **𑀓** (fig. 22, &c.) in the different combinations it enters into on the coins; and as **𑀓** (Sáh Inscription), **𑀓** (Gupta Girnar Inscription, Jour. Bombay Branch As. Soc.), and **𑀓** (Guzerát Plátes) on the various inscriptions of a proximate æra.

4TH KING.

DAMA SAH.

(Communicated by Dr. Bird.)

Obv. Head as usual. Legends and date **𑀓𑀔𑀕𑀖**. This date recurs on several coins of this prince.

Rev. Symbols as usual. Legend—

**राज्ञो महा क्षत्रपस दामा साहस राज्ञो महा क्षत्रपस
रुद्र साहस पुत्रस**

*Rājño Mahá Kshatrapasa Dámá Sáhasa Rājño Mahá Kshatrapasa
Rudra Sáhasa putrasa.*

5TH KING.

VIJAYA SAH, SON OF DAMA SAH.

Figures—9 (R. A. S.), 10 (Prinsep), Plate I.; No. 4, Plate III.

OBV. Head as usual. Fig. 9, legend illegible, date ३१ Other dates: East India Company's coin, ३१७; Dr. Bird's, ३५ ३१३ and ३१५ Imperfect legend from a coin of Colonel Wynch's, commencing after the date, ११११११११११११.

REV. Symbols as usual. Legend—

राज्ञो महा क्षत्रपस विजय साहस राज्ञो महा क्षत्रपस

दामा साहस पुत्रस

*Rājno Mahā Kshatrapasa Vijaya Sāhasa Rājno Mahā Kshatrapasa
Dāmā Sāhasa putrasa.*

In the coin No. 9, and uniformly in those of the 6th and 10th kings of the present list, is to be noticed the use of the superfluous genitive termination स affixed to the penultimate word साह, making साहस पुत्रस instead of साह पुत्रस, as it is expressed in the generality of instances. The name विजय is usually, though not invariably written with the long ई instead of the short इ required by correct orthography. It will be seen, on a reference to the various Sanskrit legends arranged in Plate III., that much license was admitted among the Surásbtran die-cutters in the interchange of the long and short superscribed vowels ई इ (see स्वामी and जीव Pl. III. fig. 2; विश्व III. 8, 11; and सिंह III. 8, &c., &c.). Any rectification of these and such like errors will be accepted with the more confidence when it is borne in mind that the particular inaccuracy now noted has, in effect, been set right by the mint engravers themselves, in their occasional employment of the regular form of the short इ in the same word विजय.

6TH KING.

VIRA DAMA, SON OF DAMA SAH.

Figures—11 (Steuart), 12 (Steuart), Plate I.; No. 5, Plate III.

Obv. Head as usual. No. 11, legend illegible; date, doubtful,
१ : ५.

Rev. Symbols as usual.


राज्ञः क्षत्रपस वीर दासः राज्ञो महा क्षत्रपस दामा
साहस पुत्रस

*Rājnah Kshatrapasā Vīra Dāmnah Rājno Mahā Kshatrapasa Dāmā
Sāhasa putrasa.*

7TH KING.

DAMA JATA SRIYAH, SON OF DAMA SAH.

Figures—13 (E. I. C.), Plate I.; No. 6, Plate III.

Obv. Head as usual; date, illegible; imperfect legend . . YHOH . .
Colonel Sykes's coin has the imperfect date  (the second figure is probably a ५), and the following portion of the legend, IYHOIC . .

Rev. Symbols as usual. Legend—

राज्ञो महा क्षत्रपस दामा जट श्रीयः राज्ञो महा क्षत्रपस
दामा साह पुत्रस

*Rājno Mahā Kshatrapasa Dāmā Jata Sriyah Rājno Mahā Kshatra-
pasa Dāmā Sāha putrasa.*

The facsimile of the reverse inscription, from whence the lithographed legend in Plate III. has been copied, was taken from the imperfect coin in the Library at the India House engraved as fig. 13, Pl. I. Dr. Stevenson had already given the above reading of the king's name from a second better-preserved coin also found at Junir, which did not form part of the collection sent to the Court of Directors. This interpretation has since received a degree of confirmation from a

coin of Colonel Sykes', which was placed in my hands after the completion of the plates which accompany this Memoir.

Subjoined is a correct copy of the letters of the king's name taken from the coin in question.

𑀲𑀸𑀓𑀭𑀺𑀓𑀾𑀢𑀺𑀓

8TH KING.

RUDRA SAH, SON OF VIRA DAMA.

Figure—14 (E. I. C.), Plate I.; No. 7, Plate III.

Obv. Head as usual. Fig. 14, date 𑀲𑀸𑀓𑀭𑀺𑀓𑀾𑀢𑀺𑀓; commencement of legend 𑀲𑀸𑀓𑀭𑀺𑀓— There are no less than three clear examples of this same date on different coins of Rudra, the son of Vira. Imperfect legend, after the date, 𑀲𑀸𑀓𑀭𑀺𑀓𑀸𑀺𑀓 (Wynch).

Rev. Symbols as usual. Legend—

राज्ञो महा क्षत्रपस रुद्र साहस राज्ञः क्षत्रपस वीर
दामा पुत्रस

*Rājno Mahā Kshatrapasa Rudra Sāhasa Rājñah Kshatrapasa Vira
Dāmā putrasa.*

9TH KING.

VISWA SINHA, SON OF RUDRA SAH.

Figures—15 (R. A. S.), 16 (Dr. Swiney), 17 (Prinsep), Plate I.; No. 8, Plate II.

Obv. Head as usual. Fig. 16, date 𑀲𑀸𑀓𑀭𑀺𑀓𑀾𑀢𑀺𑀓; possibly 𑀲𑀸𑀓𑀭𑀺𑀓. Fig. 17, date 𑀲𑀸𑀓𑀭𑀺𑀓𑀾𑀢𑀺𑀓. Legends illegible. Other dates—coin in British Museum, 𑀲𑀸𑀓𑀭𑀺𑀓𑀾𑀢𑀺𑀓. Prinsep (J. A. S. B., vii. 351), 𑀲𑀸𑀓𑀭𑀺𑀓𑀾𑀢𑀺𑀓.

Rev. Symbols as usual. Legend—

राज्ञः क्षत्रपस विश्व सिंहस राज्ञो महा क्षत्रपस रुद्र
साह पुत्रस

*Rājñah Kshatrapasa Viswa Sinhāsa Rājno Mahā Kshatrapasa Rudra
Sāha putrasa.*

The second name of this Rāja has hitherto been supposed to be the familiar Sāha; but the clear impressions of the legend on many of the coins now available disclose obviously the vowel *ī* ई (possibly used for *ī* इ) above the first down-stroke of the initial *s* स, and conclusively determine that *Sinha* is the proper reading of the word. The inscriptions on the coins of this prince vary occasionally in the introduction of the prefix महा *Mahā* before the क्षत्रप *Kshatrapa*, as applied to the sovereign's own name.

Dr. Stevenson, in his paper on the Junír Coins, in the Bombay Asiatic Journal, in noticing a medal of this prince, expresses an opinion that "this is a new coin" * * * "and this sovereign is not to be confounded with his predecessor or successor of the same name." Dr. Stevenson appears to have been led into the error of imagining this to be a novel discovery by a misprint in Prinsep's last list (J. A. S. B., vii. 351), wherein this very Viswa is made to appear as the son of *Vira Dámd*, instead of what was seemingly intended to be said, and what is shown to be the real fact by the illustrative coin thereunto annexed (J. A. S. B., fig. 6, Pl. xii., and p. 355), that he was the son of *Rudra Sáh*, Prinsep's 6th king.

10TH KING.

RUDRA SAH, SON OF RUDRA SAH.

Figures—18 (Sykes), 19 (Prinsep), Plate I.; No. 9, Plate III.



Obv. Head as usual. { Fig. 18, 1 
 " 19, 1 
 Rev. Fig. 18, symbols as usual.

Fig. 19, general symbols as usual, but the constellation is transformed into a radiated sun?

राज्ञः चक्रपथ इद्र साहस, राज्ञो महा चक्रपथ इद्र
साहस पुत्रस

*Rājnah Kshatrapasa Rudra Sāhasa Rājno Mahā Kshatrapasa Rudra
Sāhasa putrasa.*

Prinsep (J. A. S. B., vii. 355) proposed—with but a doubtful degree of confidence in his own suggestion—to read *from the coin* (J. A. S. B., Pl. XII. 12) the name of this prince's father as Rudra Dámá Sáh, the appellation of the Repairer of the Girnar Bridge, as then supposed to be recorded on the Rock Inscription near Junagarh. Prinsep's own coin, now in the British Museum (reproduced in Pl. I. as fig. 19), does not by any means bear out the identification in question; indeed, it definitively proves that it was erroneous, as the father's name is here distinctly seen to stand as रुद्र साहस, without any appearance of the additional name of Dámá.

11TH KING.

ATRI DAMA.

Figures—20 (Sykes), 21 (Sykes), Plate I.; No. 10, Plate III.

Obv. Head as usual; date and inscription entirely wanting. Dr. Bird's coin, ८७

Rev. The usual symbols, but imperfectly executed. Legend—

राज्ञो महा क्षत्रपस अत्रि दासः राज्ञो महा क्षत्रपस रुद्र
साह पुत्रस

*Rājno Mahá Kshatrapasa Atri Dámnah Rājno Mahá Kshatrapasa
Rudra Sáha putrasa.* ..

Dr. Stevenson has ventured to alter the old reading of the name of this prince, by substituting a भ for the initial अ, making the word Bhatri instead of Atri; in this he is merely following Prinsep, who had already applied a similar emendation to the same name, as found on the coins of the son, Viswa Sáh, the 12th of our list. (J. A. S. B., vii. 355.)

A collation of a number of specimens of the coins of both father and son, with a special view to the verification of the initial letter of the doubtful name—even allowing for a slight variation to be seen in the form of the present letter अ, distinguishing it from the earlier अ on the coins of Aśá Dámá—leaves no doubt but that Atri is the correct

interpretation. Dr. Stevenson has apparently been misled—as probably was Prinsep himself—by the imperfect expression given to the upper part of the first perpendicular line of the old form of the letter **अ** as seen on many of the coins. Now, as this additional upper stroke constitutes the only difference between the due form of the letter **अ** of the Sáh alphabet, and one of the accepted representatives of the **अ** on the *Gupta* Surashtran coins, the mistake may be said to have been very natural, though, subjected to a critical examination, there were from the very first, decided palæographic objections to the new reading, in the facts that the **अ** of the corresponding Sáh Inscription was obviously a very differently formed character, and the Gupta **अ**, which was to be assumed as a fixed exemplar of its predecessors, was in itself of a very unsettled and undetermined shape (Pl. III., a, b, c, d, e). In regard to Dr. Stevenson's case, in the very coin he publishes—it is to be supposed to prove his position—the upper stroke of the old **अ**, though certainly not so prominent as the other lines of the letter, is palpable enough to have decided the real value of the character in question. (Bombay Journal, 1847, Pl. XXIV. fig. 9.)

In the legends of the coins of Atri Dámá, the visarga is occasionally inserted after the **दा**.

12TH KING.

VISWA SÁH, SON OF ATRI DAMA.

Figures—22 (Sykes), 23 (Steuart), Plate I.; No. 11, Plate III.

Obv. Head as usual; fig. 22, **ॐ** fig. 23, **ॐ**, **ॐ**
Dr. Bird's coins, **ॐ** and **ॐ**

Rev. Symbols as usual. Legend—

राज्ञः कचपस विश्व साहस राज्ञो महा कचपस अत्रि
दामा पुत्रस

Rājnah Kshatrapasa Viswa Sáhasa Rājno Mahá Kshatrapasa Atri Dámá putrasa.

The legends on these coins call for no remark beyond a reference to the irregular use of the visarga after the opening राज्ञ. It will be seen that the visarga has been uniformly added in these modern transcripts of the legends, according to the requirements of the language, without reference to its omission in the original superscriptions on the coins. A similar liberty has been taken in the rejection of the final vowel ō (ॐ) in the same word, where it appears to have been unduly inserted.

13TH KING.

SWAMI RUDRA DAMA.

(No Coins.)

14TH KING.

SWAMI RUDRA SAH, SON OF SWAMI RUDRA DAMA.

Figures—24 (Prinsep), 25 (Prinsep), Plate I.; No. 12, Plate III.

Obv. Head as usual. Fig. 24, date १०५ Fig. 25, date १०८ Other dates:—two coins in the British Museum, and one of Dr. Bird's, ११४

Rev. Symbols as usual, but imperfectly expressed. Legend—
राज्ञो महा क्षत्रपस स्वामी रुद्र साहस राज्ञो महा क्षत्रपस

स्वामी रुद्र दामा पुत्रस

Rājño Mahā Kshatrapasa Swāmi Rudra Sāhasa Rājño Mahā Kshatrapasa Swāmi Rudra Dāmā putrasa.

The legends on the coins of this prince, which are usually expressed in very imperfect letters, vary in the occasional omission of the final स of साहस.

Figure 26 (Prinsep) is the obverse of an unidentified coin, the monarch's name on the reverse being completely obliterated, though the portion of the legend, which affirms that the king in question was the *Son of Rudra Sáh*, still remains.

The sketch of this piece has been introduced into the plate for the purpose of showing the curious form of the second numerical symbol **८**, which occurs on no other coin in such entire distinctness of outline. Prinsep (J. A. S. B., vii. 351) gave this piece to Atri Dámá, but the remaining letters of the legend scarcely authorize this or any definite assignment, though otherwise I am inclined to concur in the attribution itself, in consequence of the detection of traces of a similar figure, similarly placed, on an undoubted coin of Atri Dámá, and the confirmatory fact of such a symbol appearing in full distinctness on the money of the son [and successor?], Viswa, the 12th king.

SQUARE LEADEN COINS.

The series of square leaden coins delineated in the commencement of Plate II. may be supposed, from identity of the principal emblems of the reverse device, and the general coincidence of the accompanying ciphers, to have formed the lower circulating medium, concurrently with the more valuable silver money just described. The obverse face of these coins displays the standing figure of the humped Bull, facing to the right, above which is seen a curiously elongated star, or diamond-shaped double arrow-head. The reverse bears the usual pyramidal emblem, surmounted, as in the associate series of silver money, by the crescents and stars. The accustomed wavy line is here, however, opened out towards the centre, and below this occur the figures it is proposed to accept as representing dates.

These pieces possess value, in the elucidation of the general inquiry, beyond the useful affirmation of the correct and complete outlines of many of the numerical symbols imperfectly retained by the silver coins, in the fact that the occurrence of the different sets of figures, as isolated impressions—here also varying in themselves irregularly as dates would do—lends support to the previous identification of the intention attending the use of the like figures as found in anomalous juxtaposition with the Greek legend on the obverse of the silver coins.

Fig. 27, Pl. II., date 𑀮𑀸𑀓 Fig. 28, 𑀮𑀸𑀓𑀲 Fig. 29, 𑀮𑀸𑀓𑀲 Fig. 30, $\text{𑀮𑀸𑀓𑀲} [\text{𑀲?}]$ Fig. 31, 𑀮𑀸𑀓𑀲

Fig. 32 is a *reversed* die,
which should properly
express 𑀮𑀸𑀓𑀲

Extra dates from other coins— $[\text{𑀮}] \text{𑀸𑀓} - \text{𑀮𑀸𑀓}$

ROUND LEADEN COINS.

Obv. An elephant, facing to the right.

Rev. The usual pyramidal symbol, crescents, and stars. Figs. 33, 34, date 𑀮𑀸𑀓

These leaden coins are *all* from the Cabinet of Colonel Sykes.

Prinsep has published one of these coins (which he, however, notices as composed of *copper*), dated 𑀮𑀸𑀓 See No. 22, Pl. XII., Vol. VII., J. A. S. B.

Before taking leave of the pure Sáh Suráshtran coins, it is necessary to mention that there are certain specimens of a copper coinage completely analogous with the silver series, and apparently running much about the same size and shape. (See Fig. 27, Pl. XII., J. A. S. B. vii.; the original coin weighs $22\frac{1}{2}$ gr.)

But beyond this is to be noticed the unique copper coin engraved as No. 14, Pl. XII., Vol. VII., J. A. S. B.¹, which is remarkable—though assimilating in many respects with the silver money—in the rejection of the obverse Sáh head, which is replaced by a figure of a Bull, nearly identical with the animal on the square leaden pieces, around which is traced an unintelligible succession of the usual Greek-looking letters. The reverse legend appears, from the intervals between the letters, to have been more brief than the inscriptions on the silver coins, and the characters themselves are perhaps of a slightly modernized form. Of the entire legend, the words राज्ञो महा चक्र alone are visible.

¹ Prinsep (J. A. S. B., vii. 356) mentions that this coin had been presented to him by Lieutenant Conolly, who had obtained it at Ujein. I have not been able to find the piece in question in the Prinsep Cabinet in the British Museum.

1ST SUB-SPECIES. (SILVER.)

This group of coins—as yet unattributed—has been placed immediately after the identified Sáh series, on the strength chiefly of the forms of the Devanágari letters, which will be seen in the few legible characters traceable on the two best specimens (Figs. 35, 36), to approximate closely to the most correct outlines of the letters of the assumed prototypes, especially in the expression given to those admirable test letters which serve to form the word राज्ञो.

Looking to the limited supply and the imperfect condition of the originally well-executed coins, the utter barbarization of the more plentiful imitations, as well as to the want of definite data for fixing the *locale* of their fabrication and circulation, it would be hazardous to speculate on the detail history of the series; and though their derivation from the Suráshtran stock may be admitted as palpably obvious, the general mechanical indications disclosed are insufficient to justify any decision either in the one case, as to their issue *contemporaneously* with their exemplars as money of a once subject but momentarily disjoined and independent monarchy; or, on the other hand, when viewed as the *sequent* imitation of the Sáh currency constituting the coinage of a distinct dynásty, it would be difficult to say whether that dynasty reigned in Guzerát or some proximate country once in subordination to or in intimate correspondence with the Suráshtran peninsula.

The obverse surface of these medals offers but little to remark upon beyond the general coincidence of the form of the head with the more perfectly executed representations to be seen in the preceding series. In the better finished specimens of the present class¹, this face of the coin has suffered so much from the action of time and from oxidation, that the more exact details, which might have served the purposes of a close comparison, are altogether wanting; and in the later examples of the coinage—as has been before observed—there is such a striking absence of the *artist's* hand, that but slender faith can be placed in the evidences conveyed by the work. One single item seems safely deducible from the unoccupied margin, to be found around the bust in the broader coins, viz., that the use of Greek or its attempted representation was here discontinued.

¹ Figures 35, 36.

The reverse face displays a Sanskrit marginal legend, at first very similarly outlined to the inscriptions on the Sáh coins, and occupying, as of old, a considerable portion of the entire field; the central symbol is, however, altogether changed, and in place of the pyramid and stars, we have the unquestioned *Buddhist* device, the figure of a man—the appropriate sign of the Buddhist layman¹, the counterpart of which is found on the Behat, and many other classes of early Buddhist Coins².

Plate II. Figure—35 (Prinsep collection, to which it was contributed by the late Captain Conolly; found at Ujein), weight 28·5 gr.

Obv. Head, similar in character to those found on the Sah series of coins, but apparently unaccompanied by any legend.

Rev. The lower portion of a crude outline figure of a man. More entire specimens show that it usually has the right arm upraised. (See also engravings of a similar but less finely-finished coin, delineated as fig. 21, Pl. XVIII., Vol. III., and fig. 9, Pl. XLIX., Vol. IV., J. A. S. B.)

The major part of the legend is illegible, though many isolated letters are readily identifiable, and the entire word **राज्ञो** is plainly discernible, to which may fairly be added, on the confirmation afforded by other analogous coins, the highly important words **महा चक्रपस**³, which establish still more conclusively the connexion existing between this and the preceding class of pure Sáh money.

Plate II. Figures—36, weight 23 gr.; 37, weight 28 gr.; and 38, weight 31 gr. (Sykes).

Coins of similar type to the last, but of imperfect execution, arranged in the order of their comparative deterioration.

¹ Csoma De Koros, "Dulva," xx., As. Res., p. 86, sec. 11.

² Ar. Ant., Pl. XV. figs. 23, 24, 25; also J. A. S. B., iv., Pl. X., fig. 16; Pl. XXXV., figs. 45, 47; and vii., Pl. XXXII., figs. 12, 13, 14, &c., &c.

³ J. A. S. B., iv. Pl. XLIX., fig. 8.

COINS OF KUMARA GUPTA.

Plate II. Figures—39 (R. A. S.), weight 33 gr.; 40 (Prinsep), weight 33 gr.; 41 (Prinsep), weight 33·3 gr.; 42 (Prinsep), weight 32 gr. Legend, Pl. iii., *a*.

Obv. Head but little changed from the Sáh type; legend, at the back of the head, NANO, and at times ५AO NANO. On some specimens of this class of coins the legend is placed in front of the profile.

Rev. A symbol, the meaning of which has not been hitherto decided on by modern numismatists; it is not impossible that it may be intended for a peacock: the legends are at times doubtful in the second word, which has been also read भानुवीर Bhánuvíra¹; but the generality of specimens disclose the following inscription:—

परम भगवत राजाधिराज श्री कुमार गुप्त महेन्द्रस्य

Parama Bhagavata Rájádhirāja Śrī Kumāra Gupta Mahendrasya.

N.B. The facsimile legend, given as *a*, Pl. iii., has been taken from the original coins engraved as figs. 40, 41. The coins under notice are not always complete in the Sanskrit legends; as instances, an otherwise very perfect piece in the cabinet of the Royal Asiatic Society has the word राजाधिराज abbreviated into राजाध; and No. 39 has the same word contracted to राजाधिर.

COINS OF SKANDA GUPTA.

1st. Money having for the reverse device the same symbol as is found on the coins of Kumāra Gupta.

Figures—43 (R. A. S.), weight 27 gr.; 44 (Prinsep), weight 23 gr.

Obv. Head very much barbarized, but still retaining sufficient character to make it readily identifiable as a derivative from the old Sáh type. On some specimens is to be seen the word NANO to the front of the profile.

¹ Prinsep, J. A. S. B., vii. 356. See also variant *a*, Pl. III.

REV. A very debased imitation of the (Peacock?) symbol which characterises the silver coins of Skanda's predecessor, Kumāra Gupta. Restored legend—

परम भगवत श्री स्कन्द गुप्त क्रमादित्य
Parama Bhagavata Śrī Skanda Gupta Kramāditya.

Prinsep, in his collated reading of the legends on these coins (J. A. S. B., vii. 356), adopted the letter म (for महा) as occurring after the word भगवत (or भगदत as he made it), which he found to be followed by the title of राज, which precedes the name of the monarch. This rendering he would seem to have drawn from fig. 29, Pl. II., Stuart (J. R. A. S., 1837); but as the like letters do not generally recur, I have marked this as the exception rather than the rule. Other specimens of this class of coin will be found engraved as figs. 18, 19, 20, and 21, pl. xii., Vol. VII., J. A. S. B.

2nd. Coins with the reverse device of a Bull.

Figures—45 (R. A. S.), weight 30 gr.; 46 (R. A. S.), weight 21 gr.

OBV. Coarsely designed head, with traces of the word NANO in front of the profile.

REV. Figure of a Bull (Nandī) recumbent, identical in every respect with the seal symbol of the Valabhi family, as found on their Copper-plate Grants. (See J. A. S. B., iv. pl. XL, and p. 487.) Restored legend—

परम भगवत श्री स्कन्द गुप्त क्रमादित्य
Parama Bhagavata Śrī Skanda Gupta Kramāditya.

These legends are often imperfect, and very constantly of unequal length, an irregularity resulting apparently from the amount of room the die-sinker happened to find himself possessed of as he proceeded with his engraving. Thus in one coin (Wilson, Ar. Ant., pl. XV. fig. 19) the second word appears to have been contracted into its initial letter, and the three letters that should have succeeded are replaced by the two letters serving to express the word राज. In

other instances, where there has been a superabundance of space, an र in one case, and an रज in another, have been inserted over and above the words and letters adopted in the detail above.

Plate II. Figures—47 (*Mihī*), weight 23 gr.; 47 (*Mihī*), weight 29 gr.
Found in the Doab of the Ganges and Jumna.

Obv. Crudely executed head.

Rev. Bull *couchant*.

The inscriptions on these coins, though partially legible, do not afford any trustworthy reading of the purport designed to be conveyed, as the letters of the legends, though clear at different points, are in general much abraded, and have originally been but imperfectly defined. These sister coins have been placed in their present position as palpably connected with the Bull series of Skanda Gupta, and though the name inscribed may be for the present unrecognisable, enough remains of the different characters of the inscriptions to prove that they do *not* bear the name of that monarch: as such, they raise an important historical question as to who their producer, this imitator of Skanda Gupta, was. Their insertion among the present engravings may serve to introduce their claims to the notice of possessors of more perfect specimens of the same class of coins, through whose means light may possibly be thrown on this branch of the enquiry.

3rd. Coins having the *Túlsí* device.

Plate III. Figures—49 (Prinsep), weight 22·5 gr.; 50 (Prinsep), weight 28 gr.; 51 (Prinsep), weight 33 gr.; and legends *d*, *e*, Pl. III.

Obv. The usual head, generally ill defined, but still identical in many respects with the original type on the obverse of the *Sáh* medals, occasionally accompanied also by distinct traces of the word *NANÓ*.

Rev. Central symbol in the form of an altar, which is taken to represent the common altar-shaped receptacle of the sacred *Túlsí* tree of the Hindús. Legends restored—

Fig. 49, II., and *d*, III.

परम भगवत श्री स्कन्द गुप्त क्रमादित्य

Parama Bhagavata Sri Skanda Gupta Kramāditya.

Fig. 50, II., and *d*, variant, III.

परम भगवत श्री स्कन्द गुप्त परमादित्य

Parama Bhagavata Sri Skanda Gupta Paramāditya.

Fig. 51, II., and *e*, III.

परम भगवत श्री विक्रमादित्य स्कन्द गुप्त

Parama Bhagavata Sri Vikramāditya Skanda Gupta.

There are between seventy and eighty specimens of these various Tulsī device Skanda Gupta coins in the Prinsep collection. They are commonly but carelessly fashioned, and unevenly struck. The letters of the legends, however, are in high relief, and unusually well preserved, though there is at the same time a decided absence of uniformity in the expression of many characters of analogous value, and their general outline is remarkable for a degree of rudeness, similar to that already noticed by Prinsep¹ as existing in the coeval alphabet of the 3rd or Skanda Gupta Inscription on the Girnar Rock.

The irregularity in the completion of the legend cited as occurring on Skanda Gupta's coins with the Bull reverse, appears in a still greater degree in those of the present class.

PEACOCK COINS.

Plate II. Figures—52 (*Mihī*), weight 30 gr.; 53 (Swiney),* weight 36 gr.; 54 (Swiney), weight 32 gr.; 55 (Swiney), weight 32 gr.; 56 (Prinsep), weight 35·8 gr.; 57, engraved from the cast of a coin—the original in the possession of Mr. Vincent Tregear—communicated by Dr. Swiney.

The facsimiles of these coins have been added to the engravings of the different series of modals which illustrate the more especial subject of the present memoir, with a view to show another—perhaps the final—ramification of the imitations of the old Sāh model. It is to be remarked that, judging from the localities in which they are now chiefly discovered, the point of their original issue should be referred

¹ See remarks quoted in note 2, page 10, *supra*, and the facsimile of the inscription itself in the Journal Bombay Branch Asiatic Society for April, 1812.

to some spot in Central¹ rather than in Western India. This attribution—though claiming for these pieces a site somewhat removed from the more immediate *locale* of the circulation of their prototypes—does not in any way militate against the probabilities resulting from the previous history of the series, whence the standard of this money is supposed to have been derived. The possession of both the country upon the Ganges, and the entire land up to and including the peninsula of Guzerát, by one and the same supreme ruler—as is seen to have been the case under Kumára and Skanda, if not under others of the family of the Guptas—would naturally induce a more than usually free inter-circulation of the local currencies of each. The Eastern provinces being deficient—as the Indo-Scythic and Gupta coinages severally teach us—in any sustained silver currency, would unhesitatingly adopt the useful intermediate circulating medium of a Western state, which bore the impress of their mutual paramount sovereign. Having thus found its way into the bazars of the upper Gangetic districts, there would be little hesitation in a succeeding dynasty—even of so far purely Eastern origin—adopting it as its model type for a new coinage, in preference to the Greek silver pieces supposed to have been, to a certain extent, in associate circulation with the Indo-Scythic and Gupta gold, or the more crude specimens of the ancient local mintages that may still have kept their place among their more modern substitutes.

In regard to the superscriptions on the reverse of these coins, it will be seen that it is somewhat difficult to discriminate satisfactorily the true value of many of the letters, as there is not only a general want of due definition in the better outlined characters, and a confused agglomeration of the distinctive lines of each, but there is likewise, in the majority of instances, a palpable bungling and incomplete formation of the letters which leads to a necessary distrust in any mere tentative reading, unsupported by such leading hints or collateral evidence as might suggest or confirm any reasonably admissible decipherment.

A collation of the inscriptions on the best specimens at present procurable, leads to thus much of a definite conclusion, that the superscriptions vary on different coins, which may be taken to prove that the entire class represents the mintages of various members of a dynasty, in contradistinction to the coinage of a single king.

¹ "Figures 10, 11, 12 [Pl. XLIX., Vol. IV., J. A. S. B.] are of a different type, though nearly allied to the former [the Suráshtrans]: they are found not only in Gajerat, but at Kanouj, Ujjain, and generally in Upper India." Prinsep.

It will be seen that the average weight of the specimens cited is slightly over the usual weight of the Sáh and Gupta pieces; the difference is, however, by no means sufficient to invalidate the supposition of a derivation from the last named source.

The coins themselves demand but brief notice. The Head on the obverse will be found to have attained much of the marked character of Indian art, especially in the execution of the eye, which may almost be traced, in the accompanying engravings, step by step through its successive stages of *Indianization*, from the classical form communicated by the Suráshtrian artists to the barbarous full front optic on the side face, which so disfigures the heads on these coins. The other details in the execution of the bust have pretty well kept pace in the general degradation of style; but among the minor objects, the attention is attracted to the retention, or rather reproduction, of the exact Sáh collar. In front of the profile are three letters, superposed after the manner of the legends on the Eastern Gupta modals.

The Indian designers make a better display on the reverse than the crudities that disgrace the opposite surface would have led us to anticipate. The central device—the Peacock—is here boldly conceived and creditably executed. The letters, too, to judge from the coin engraved as No. 52, must at times have been well modelled, though there is a failure in the working out of the details, and a confusedness of the inner lines of the characters, even while the external form appears to have been accurately rendered; and to do the engravers full justice, they seem to have proposed to themselves uniformly to express the requisite superscribed vowels, though these have naturally suffered from their exposed position on the edge of the piece, in addition to any faults they may have derived from the imperfection of the dies.

The style of writing employed appears to follow, at but a moderate distance, the alphabet of the Guptas, as in use in their Eastern states, and among the rest, the letters क ग ज ध त द य ब र and न may be cited as nearly identical with the corresponding characters on the Gupta Láts. The व and त—and occasionally the न—on the coins are at times easily confounded, as they are often wanting in the several openings which should give each its distinctive value.

Without attempting to analyse the legends in detail, or to propose any reading for the introductory laudatory titles, supposed to precede the name, I may notice—though distrusting my materials—that the names on Nos. 55, 57, allowing for the obvious malformation of the letters, may readily be taken for श्री बुध गुप्त *Srī Budha Gupta*, the

very name that is found on the inscription on Bhīm Sen's Pillar at Erun, near Sāgor. Assuming this designation to be correctly read, the collateral evidence derived from the inscription coincides sufficiently with the indications offered by the coins themselves. From the former we gather that Budha Gupta held the country lying between the Nerbudda and a river it has been proposed to identify as the Jumna¹; no information is however afforded as to the whereabouts of his seat of government, nor can the geographical boundaries, thus defined, be said to convey any very definite knowledge of the real extent of the dominions adverted to. Prinsep considered that Surashtra should be held to have constituted a portion of this king's possessions, but the expressions in his own translation of the inscription—even admitting it to be an accurate rendering—are far from implying any such condition; the occupation of land touching these two rivers, taking Sāgor as anything like its centre, would encircle comparatively narrow limits, and would not by any means of necessity embrace the whole land to the western coast.

If Budha Gupta is to be looked upon as a scion of the ancient family of the Guptas, whose might is chronicled on the Lāts of Allahabad and Bhitāri, and on the Rock of Junagarh, it is clear by his subjects' own showing, that he possessed a sovereignty much reduced in extent from the empire originally ruled over by his predecessors in the palmy days of the race.

In addition to the Pillar record, there is also an inscription on the temple at Erun, near which the Pillar itself was erected. From the incidental notices to be found in these monumental writings, it would appear that their execution must have been very nearly contemporaneous; the one work having been undertaken "by," the other at the "cost of," a certain Dhanya Vishnu. In the temple inscription, which

¹ Prinsep's translation of this inscription runs—"On Thursday, the 13th lunar day of the month of A'shadha of the year 165, when the King, Budha Gupta * * governed the beautiful country situated between the Kalindi (Jumna) and the Narmada * * in the aforesaid year of his dynasty." *J. A. S. B.*, vii. 634.

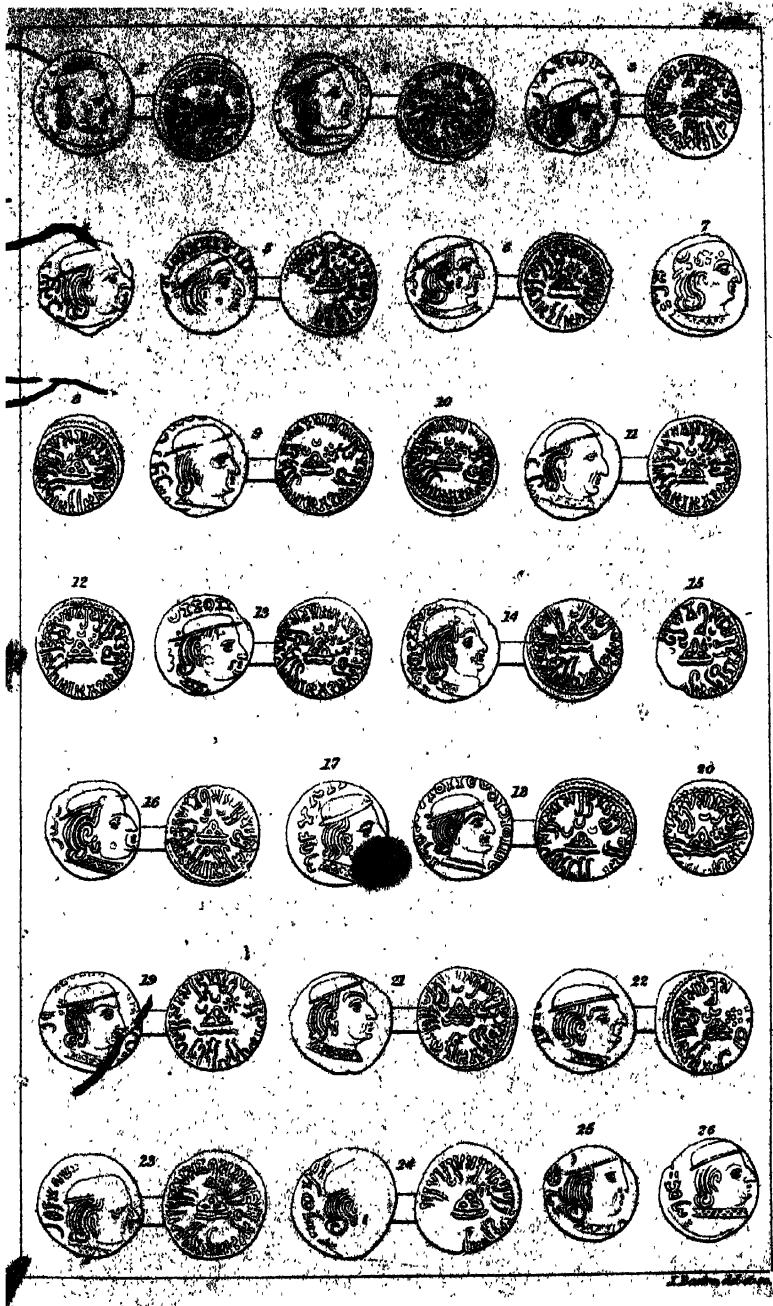
The word transcribed as कालिन्दी, when tested by the facsimile of the inscription itself (Pl. XXXI., Vol. VII.), is by no means a satisfactory rendering, each letter of the entire word—with the single exception of the ई—being open to objection, besides which the very legible र over the concluding compound letter in the original remains altogether unaccounted for in the modern transcript.

is probably the earliest of the two, it is stated that the edifice itself was built in the first year of the reign of Tárápáni, the suzerain then acknowledged in this part of the country¹. The writing on the pillar, on the other hand, informs us, as has been already stated, that, at the time of its endorsement, Budha Gupta was the lord paramount.

This change in the *Suzeraineté*, at all events, suffices to show that Budha Gupta, though he may have obtained, or even regained, possession of the country about Ságor, was far from being sole unopposed inheritor of the lands once acknowledging *Gupta* sway; and as such, his title to the nearly entire north-west of India may well be questioned, and his dominions reduced to much more moderate bounds than Prinsep was inclined to award him.

It need scarcely be noticed that in the present incomplete state of our information on the subject, the date of 163, as avowedly a dynastical date, adds nothing to our knowledge or power of determining the real corresponding epoch.

¹ "When the great rája Tárápáni, the very famous and beautiful, the King of Kings, governed the earth; in the first year of his reign," &c., &c., J. A. S. B., vii. 633.



COINS OF THE SAT KINGS OF SURASHTRA.



APPENDIX.

With a view to illustrate more fully and satisfactorily, by a direct reference to facsimiles of the medals themselves, the important connection existing between the Indo-Scythians and the Guptas, which forms a prominent point in the general question of the dates of Indian Dynasties, and in itself constitutes a subject of special reference in the above paper, advantage has been taken of the ready permission accorded by Mr. H. T. Prinsep to republish in this place the admirable engravings, prepared by the late Jas. Prinsep in the express design of establishing this particular fact, and originally inserted in the Fourth and Fifth Volumes of the Journal of the Asiatic Society of Bengal.

Were these engravings less perfect in themselves, less exact in their rendering of the nice distinguishing shades in the forms of the old Devanāgarī, Bactrian Pāli, and corrupt Greek letters, or less aptly conceived to prove the precise link upon which much of the argument of the preceding memoir has been based, more apology might be due for their republication in the pages of the Journal of the Royal Asiatic Society; but, in addition to the value now claimed for them, the limited European circulation of the Bengal Journal renders it probable that they may still prove new to a large majority of Western Orientalists; and their intrinsic merits and ample comprehensiveness will doubtless overrule any remaining objection to their reappearance.

It is not proposed to enter into any lengthened description of the coins depicted in these plates; at the same time it may be necessary to indicate generally the class to which they severally belong, and to note the legends deciphered on the more important specimens.

No. 1. KADPHISES.

Ov. BALIAEYC OOHMO KAAΘICHC.

Rev. Ariano-Pálí legend, incomplete: the general legends on these coins have been given by Prinsep (J. A. S. B., vii. 846) as *Maharajasa rajadhirajasa sabatragha ibacsa Mahi herasa dhi Mohadphusasa Nandata*, "Of the great sovereign, the king of kings both here and everywhere seizing the earth, &c., Mohadphuses the saviour." Cunningham's reading is an improvement upon this; it is as follows—*Maharajasa Rajadhirajasa Sabatragha-Suras Mahi-Suras Hima Kaphusasa Tatasa*, "(Coin) of the great king, the king of kings, the everywhere-destroying-hera, the here-of-the-world (of the tribe of) Hieu-ni Kadphuses, the preserver." J. A. S. B., 1845, p. 434.

Nos. 2, 3. Ov. Greek legends, as No. 1.

Rev. Ariano-Pálí legends, imperfect.

Nos. 4, 5, 6, 7, 8, 9, 10. Specimens of the Indo-Scythic Kanerki group, having usually the legend PAO NANO PAO OHPKI KOPANO on the Obverse, with various Reverse devices, and the several words OKPO, APAOKPO, MAO, &c., &c.

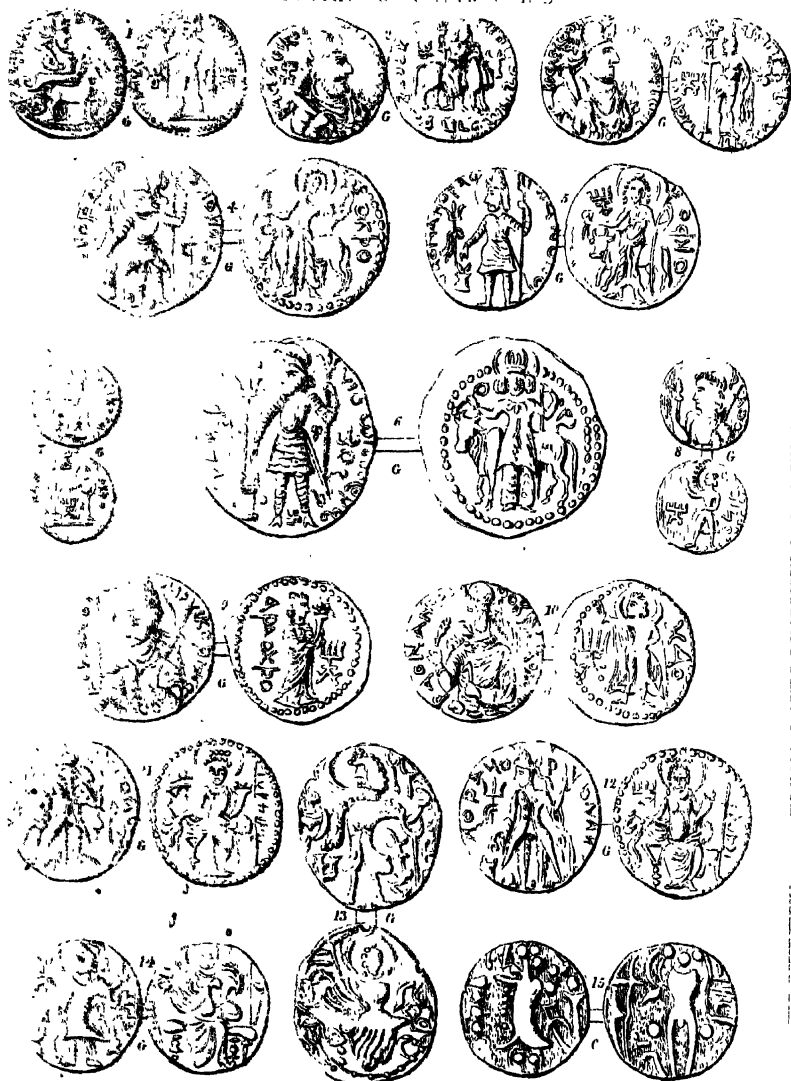
Figs. 11, 12, 14 offer slightly-changed devices, and show considerable deterioration in execution, which increases in a marked degree on Figs. 13 and 15.

Fig. 13. A coin of Samudra Gupta, having on the Obverse margin the Sanskrit legend *Śrī Parajita dāvaja*? (Prinsep), and below the left arm, in a line with the spear, the letters being superposed, as is usual in this series of coins, is to be seen the name *Samudra*. Reverse, *Parakrama*.

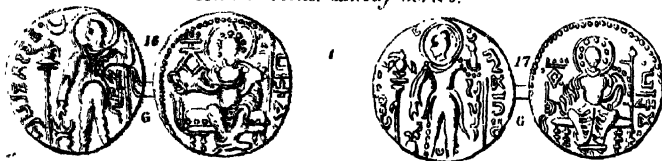
Fig. 17. Ov. Marginal legend doubtful, " " samudragatapa? Below the arm, *Samudra*.

Rev. As in No. 13.

INDO-CYTHIC & CANOUJ COINS



Hindu Coins. Canouj Series.



Hindu Coins. Kanauj Series



Fig. 18. Obv. Margin illegible. Under the arm, *Chandra*.
Rev. *Sri Vikrama*.

Fig. 19. Obv. *Samudra*?
Rev. *Apratiratha*, "The unsurpassed warrior."

Fig. 20. Legends doubtful.

Fig. 21. Marginal writing illegible. Under the arm, *Kra*.

Fig. 22. Obv. *Shanda*?
Rev. *Kramaditya*.

Fig. 23. Obv. Margin, *Kragipta paragu ja*? Under the arm, *Samudra*.
Rev. *Kragipta paragu*? This reading is very doubtful, the *gu* of the second word being invariably written *gu* in the best specimens.

Fig. 24. Obv. No letters visible.
Rev. *Sri Shanda Gupta*.

Fig. 25. Obv. *Mahā Rājādhirāja Sri*.
Rev. *Sri Sinha Vikrama*.

Fig. 26. Obv. *Mahā rājādhirāja Sri Samudra Gupta*.
Rev. *Samudra Gupta*.

Fig. 27. Obv. *Vikrama Narāma*?
Rev. *Sinha Vikrama*.

Fig. 28. Obv. Legend doubtful.
Rev. *Kumara Gupta*.

Fig. 29. Obv. } Illegible.
Rev. }

Fig. 30. Obv. " " *Mahendra Gupta*.
Rev. *Ajita Mahendra*.

Some of these Horseman Coins have—

Obv. *Parama* " " *Sri Chandra Gupta*.
Rev. *Ajita Vikrama*¹. See also fig. 6, Pl. VII.

Figs. 31, 32. Obv. Under the horse, the letters *So*.
Rev. *Asvamedha Parakrama*, The paramount hero of the *Asvamedha*.

Fig. 33. Rev. *Mahā rāja Sri Gampā*.

¹ British Museum.

- Fig. 1. OBV. PAO NANO PAO KANHPKI KOPANO.
REV. APAAΓNO.
- Fig. 2. OBV. As above, but with OOHPKI in place of Kanerki.
REV. ΦΑΡΟ.
- Fig. 3. OBV. As No. 2. REV. ΜΙΠΟ.
- Fig. 4. OBV. Legend as in No. 1. REV. NANA PAQ.
- Fig. 5. OBV. As in No. 2. REV. NANA.
- Fig. 6. OBV. As in No. 2.
REV. ΑΘΡΟ. Atara, *Zend*, fire (Prinsep).
- Fig. 7. OBV. No inscription. REV. Doubtful.
- Fig. 8. OBV. As No. 2.
REV. ΜΑΝΑΟΒΑΡΟ, "Lord of the months" (Prinsep).
- Fig. 9. OBV. As No. 1.

REV. ΑΡΔΟΚΡΟ (आर्यर्क), "The great sun" (Prinsep, J. A. S. B., v. 643). *Arđ*, "half;" *Okro*, "Siva:" hence, Wife of Siva (Lassen, J. A. S. B., 1840, p. 455).

Fig. 10. OBV. Corrupt Greek legend, similar in tenor to that on No. 1; below the right arm, between the small altar and the leg of the figure, is seen the compound Sanskrit letter *र्व* *rv*; between the legs is a second letter, which is not clearly identifiable; and on the left of the field is a character which may either be a Greek Φ, or, what is more probable, a compound Sanskrit *ह* *ohhu*.

REV. ΑΡΔΟΚΡΟ.

This coin is cited by Prinsep as the very "link of connection" between the two series of Indo-Scythic and Gupta coins.

Fig. 11. OBV. Margin illegible. Under the arm, *Samudra*.
REV. *Kragipta paragu*, or, as Prinsep here proposes, *Kubhāru paragu* (-ja being taken from the Obverse)? (See Wilson, *Ar. Ant.*, p. 424 and fig. 23, pl. V., supra.)

Fig. 12. OBV. *Kāma-naruttama-ja* गमा(नरुत), and under the left arm *KACHA*, "Son-of-an-excellent-man resembling-KAMA GHATOT KACHA."
REV. *Sarvarājochhatra*, "The overshadower of all the Rājas."

Fig. 13. OBV. Margin, *Rāja Sri Chandra* * * Under the arm, *Chandra*.
REV. *Sri Vikrama*.

Fig. 14. OBV. Margin, *Samara Satamataga(ja)*, "Having the strength of one hundred wild elephants" (Prinsep); and on the opposite portion of the margin, *Vijayajata*. Under the arm, *Samudra*.

Fig. 15. OBV. Margin illegible. Below the arm, portions on each side of the spear, *Chandra* ↑ *Gupta*.
REV. ↑ *Panch Chhavayas*? "The five excellencies" (Prinsep); *Pach-chawaya* (Wilson).

Fig. 16. OBV. *Kumara*. REV. No letters visible.

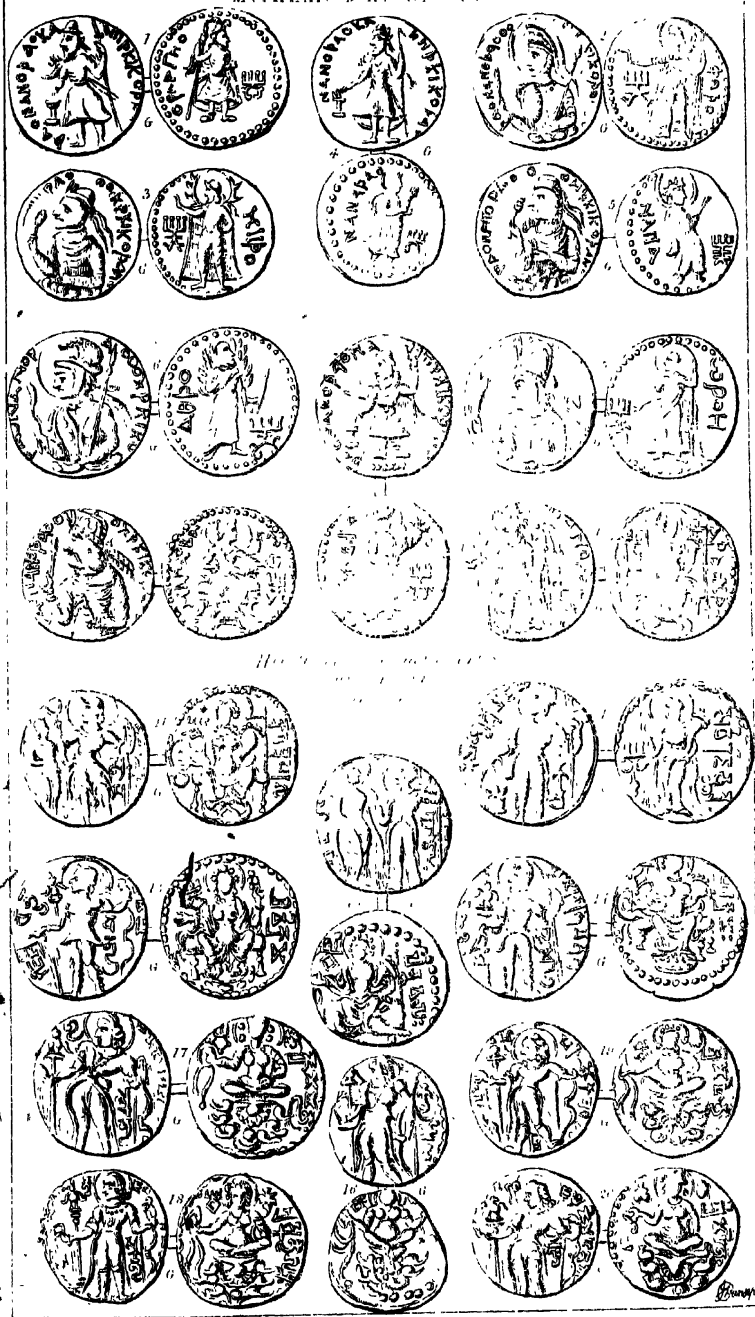
Fig. 17. OBV. Margin illegible. Under the arm, *Skanda*.
REV. *Kramaditya*.

Fig. 18. OBV. Margin illegible. Under the arm, *Skanda*.
REV. *Sri Skanda Gupta*.

Fig. 19. OBV. *Parama, &c.?* REV. *Sri Mahendra*.

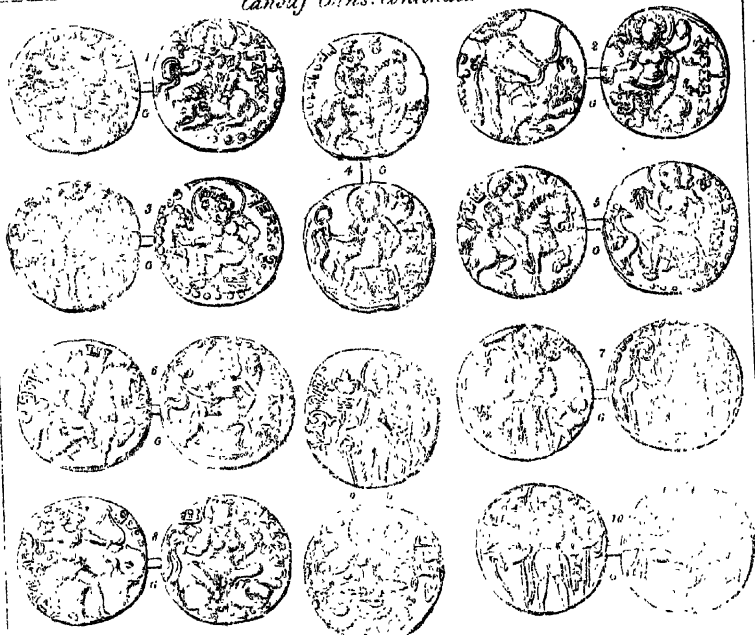
Fig. 20. OBV. *Jayati Mahendra*. Under the arm, *Ku?*
REV. *Sri Mahendra*.

MITHRAIC & HINDI COINS



Jour. As. Soc.

Canopy Coins. Continued



Copper Coins of Chandragupta



Second Series of imitations from the 'Ardokhi' type



- Fig. 1. OBV. Illegible.
REV. *Sinha Vikrama*, "The lion hero."
- Fig. 2. OBV. Illegible.
REV. As No. 1 Reverse.
- Figs. 3, 4, 5. OBV. Inscriptions doubtful.
REV. *Ajita Mahendra*.
- Fig. 6. OBV. *Parama* * * * (Chan)dra Gupta.
REV. *Ajita Vikrama*. See extra notice under fig. 30, Pl. V.
- Fig. 7. OBV. Illegible.
REV. *Vikramaditya*.
- Fig. 8. OBV. Margin, *Sri* * * * *ta Mahendra jaya*.
REV. (Sri) *Mahendra Sinha*.
- Fig. 9. OBV. Margin, *Sri Chandra Gupta* * *. Under the arm, *Chandra*.
REV. *Sri Vikrama*.
- Fig. 10. OBV. Margin illegible. Under the arm, *Skanda*?
REV. *Sri Ska(nda)*?
- Figs. 12 to 15. Copper Coins of Chandra Gupta.
- Figs. 16 to 20.* Debased imitations from the Ardokro type.

ART. II.—*Summary of the Geology of Southern India.* By
CAPTAIN NEWBOLD, F.R.S., &c., *Assistant Commissioner for*
Kurnool.

[*Concluded from Vol. ix., p. 42.*]

WITH CONCLUDING REMARKS ON THE CLASSIFICATION OF THE STRATIFIED ROCKS OF SOUTHERN INDIA, ACCOMPANIED BY TABLE SHOWING ORDER OF SUPERPOSITION.

PART XI.

AGES OF THE PLUTONIC AND VOLCANIC ROCKS.

MUCH difficulty will always exist in determining the age of granite, since no petrographical distinction, sufficiently decisive to warrant us dividing it into classes, exists. The opinion of some geologists that the ordinary syenite, or, indeed, any other variety of syenite hitherto discovered in Southern India, is more modern than the usual ternary granite of felspar, quartz, and mica, is unsupported by any of the usual proofs required by geologists to establish a fact of this nature; viz., superposition; included fragments of rocks of a determined age; intrusion into other rocks, with or without alteration.

Dr. Christie¹, a distinguished observer in the field of Indian geology, states that “at the falls of Garsipa there is a variety of granite, which differs from the common granite of India. It is not so old a granite as the latter; is composed of small grains of white felspar, quartz, and mica; has, in some instances, a slaty appearance; and is associated with gneiss and hornblende schists.” By this passage, mineral character appears to have been the only test to which this rock was put; but why the small-grained granite should be more recent than the other granites of India is not explained.

The granites of India are doubtless of two or more epochs; since we see the usual granite penetrated by granitic dykes, not only of a smaller-grained, but also of a coarser or more porphyritic granite; and nothing is more common than to witness the ordinary granite pass, by insensible gradations, into the fine-grained and porphyritic varieties.

In speaking of granite, I have alluded to the insufficiency of

¹ Madras Journal, Lit. and Sc., October, 1836, p. 457. Extract from the New Edinburgh Phil. Journal.

mineral structure as a test of the age of rocks, and with regard to a highly inclined or vertical stratification being a decisive proof of the antiquity of a formation, and horizontality of a modern origin, it is now ascertained beyond doubt, that secondary and even tertiary beds are found in a vertical position, and the oldest stratified rocks in a state of perfect repose. I have seen the tertiary nummulitic limestones of Egypt bouleversed by granite as well as lias and chalk strata; while, on the other hand, gneiss and the hypogene series are sometimes seen quite horizontal. A great part of Russia, according to Mr. Murchison and M. Verneuil, is covered with the older stratified rocks, extending in horizontal unbroken masses for the distance of nearly one thousand miles.

While it is indisputably certain that the age of different granites cannot be decided by mineral distinctions alone; still, as Mr. Lyell¹ most justly observes, one of these granites is sometimes found exclusively prevailing throughout an extensive region, where it preserves a homogeneous character; so that having ascertained its relative age in one place, we can easily recognize its identity in others, and thus determine, from a single section, the chronological relations of large mountain masses. Having observed, for example, that the syenitic granite of Norway, in which the mineral called zircon abounds, has altered the silurian strata wherever it is in contact, we do not hesitate to refer all masses of the same zircon-syenite in the south of Norway to the same era. The granite of India is not so easily mineralogically distinguished as the zircon granite of Norway, or as the stanniferous granite of the Malay peninsula; still its unusually ferriferous character, its embedding occasionally colophonite and garnet, and generally having hornblende as one of the constituents, will enable the geologist to identify it¹ in various parts of Southern India.

It is chiefly upon the very remarkable distinction of embedding the diamond, in addition to similarity of geognostic position, that we are enabled to identify the diamond sandstones of Kurnool and Cuddapah with those of Nagpoor and Bundelcund; and it is upon these grounds that having seen the syenitic granite of India altering, bouleversing, and forming breccias at the line of junction with this diamond sandstone and limestone, that we come to the conclusion that the newer granite of Southern India is of a more modern epoch than these stratified rocks which rank next in point of antiquity to the hypogene series, while the latter invariably occupy the lowest position in the normal rocks of Southern India.

¹ Elements, Vol. II. p. 351.

Not only is the newer granite of Southern India indubitably of later origin than the diamond sandstone, but there is great reason to believe that its last appearance above the face of the waters was contemporaneous with that of the laterite, as it is evident that the surface of India has undergone several oscillations.

That distinguished geologist, Elie de Beaumont, in the *exposé* of his theory of ascertaining the relative ages of mountain chains by parallelism of elevation, has attributed the elevation of the Western Ghats to a period subsequent to the deposition of the laterite. This sagacious reasoner has supposed the great dislocation to which the western scarp of this chain is owing, to have been formed at the time of the elevation of this tract above the surface of the ocean, and the laterite to have been deposited previously to, and elevated contemporaneously with, this enormous fault taking place.

It appears to me, after an attentive examination of this great geological feature of India in many situations, both at the base and summit, that several distinct epochs of *soulèvement* must have contributed to produce the present relative positions of the strata. The first—one marked by plutonic energy and violence; the last—long-continued and gentle.

We see the hypogene schists, through which the granite peaks of the Ghats rise, everywhere in a state of disturbance, bent, contorted, highly inclined, and often in vertical layers on which the laterite reposes in horizontal tabular masses. Had the laterite been deposited on their surface prior to the first violent movement, or series of movements, of which the subjacent granite formed the lever to effect the bouleversement of the hypogene strata, the laterite would have exhibited marks of corresponding disturbance and alteration, which are not evident.

In order to account for the presence of this rock in unconformable and unaltered beds on the vertical subjacent strata, and cresting the granite itself, both at the summit of the Ghats on the table-lands, and covering the low land at the base of the Ghats to the sea, it may be inferred that the violent efforts by which the granite was forced through the hypogene strata, and by which it threw them on their edges, took place in the bed of the ocean, or that, after elevation, they again subsided, to undergo a second upheaval.

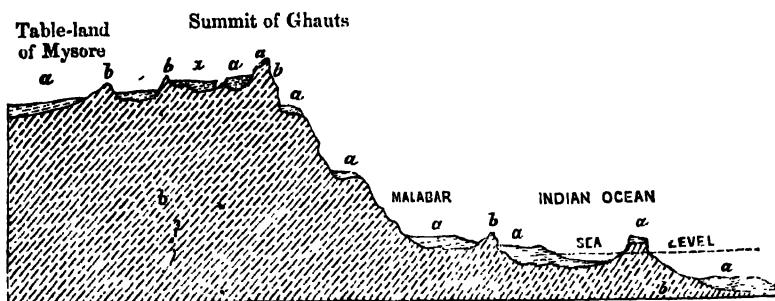
To these violent efforts a period of repose, or comparative repose, ensued; during which, and the subsequent gentler oscillations of the whole mountain mass, and the low coast tracts at its feet, the laterite was deposited; much of it, probably, while the Ghaut peaks were yet islets in the ocean. It is evident from the highly cellular structure of

the laterite, that its formation did not take place under circumstances of great pressure. Its highly ferruginous character, and the embedded fragments of granite, gneiss, trap, &c., occasionally found in its lower portions, sufficiently prove its detrital origin from these ferri-ferous rocks. Most of the fragments are little water-worn—a fact indicative of the tranquil state of the waters at the time of deposition.

The *débris* of the broken up hypogene strata afforded ample material on the spot; and which, had strong currents existed at the time of their being broken up, would have been scattered far and wide over the ocean's bed; and the result would have been an ordinary sandstone, instead of the peculiarly structured rock we now see.

Whilst this deposit was yet in progress, the Ghauts, and indeed the greatest part of peninsular India, were alternately gradually raised and depressed. The highest and consequently first raised portions became rapidly clothed with forests and luxuriant vegetation, which afforded material for the interstratified beds of lignite we see in the laterite of Malabar and Travancore.

The laterite, though not seen on the steeper portions of the scarp of the Ghauts, is often met with covering the terraces that occasionally break the face of the escarpment, as seen in the subjoined section.



The portions marked *a* denote laterite; *b*, granite and hypogene rocks.

The whole of the granite and hypogene line marked *b* was once, like the portion to the left of the section, the uneven bed of the ocean, on the hollows and inequalities of which the laterite was deposited, as the mass slowly rose to the surface. There is, I think, little reason for supposing that the beds on the summit, and those at the foot of the Ghauts, were once continuous, and afterwards separated by the violent effort that caused the scarp, or dislocation, as thought by some writers. Had such been the case, the laterite would have been broken up, thrown on its edges, and altered like the hypogene schists, as I have

already explained. Its imbedded angular pieces of granite prove that the granite was solid when the laterite was deposited; and its unaltered state, when seen in contact, that the granite has not since been heated.

The horizontal position of laterite, at such heights, sometimes upwards of six thousand feet above the sea, in the bed of which it was formed, is by no means peculiar. The sandstone forming the Table Mountain at the Cape of Good Hope is elevated on granite and hypogene rocks to upwards of three thousand five hundred feet above the sea in perfectly horizontal strata; and in the south of Sicily, and in Greece, I have seen tertiary limestone rocks in equally undisturbed stratification at the height of nearly two thousand feet above the sea.

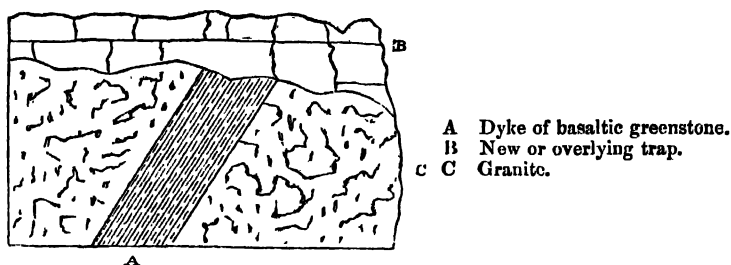
At the time Elie de Beaumont wrote his theoretical opinions regarding the age of the Western Ghauts, that of laterite was wrapped in obscurity; but the discovery in it of beds of lignite and fossil wood, and its superior position to most other stratified rocks of Southern India, claim for it a place in the tertiary series. It seems now conclusive that the great chain of the Western Ghauts was elevated lastly during the tertiary epoch.

The Himalayas, it is inferred, from the presence of the remains of the monkey, and other animals inhabiting warm climates, in the tertiary beds, which partially cover their flanks above the height of perpetual snow, and which now have a polar flora, have been raised at least ten thousand feet since the extinction of these races, within the post-pliocene period.

If these inferences be legitimate, it would appear that the opinions of Humboldt, and other physical geographers, regarding the age of the Ghauts and Himalayas relatively to those of the other great mountain chains of our planet, must undergo modification.

AGE OF THE BASALTIC GREENSTONE.

The basaltic greenstone, though occupying originally a lower position beneath the earth's crust than the granite, through the vertical fissures of which it has forced itself up, is of course, geologically speaking, posterior to it, though anterior to the overlying trap, which often covers granite and hypogene rocks penetrated by dykes of basaltic greenstone. The dykes terminate at the line of junction abruptly with the granite, without entering into or altering the superincumbent strata of trap or amygdaloid, as seen in the subjoined section.



This basaltic greenstone penetrates all the stratified rocks of Southern India up to the laterite, which it has not hitherto been seen to alter or to enter. The dykes are most frequent in the hypogene and granitic rocks, and less so in the upper layers of the diamond sandstone formation, in which period the volcanic activity appears to have greatly subsided.

It is evident that the basalt must have been ejected at more than one epoch, as the dykes are not unfrequently intersected by others of a different texture. Much of it was injected into the granite after the latter had become solid; and into the hypogene schists before they were uplifted and broken up by the elevation and partial protrusion of the plutonic rocks; since the dykes partake of all the displacements of these rocks, and in no case is the basaltic greenstone seen capping them in sheets. These older dykes do not enter into the superincumbent sandstones and limestones; and pebbles of them are occasionally seen in the conglomerates of the former.

Some of the greenstone dykes in the sandstone and limestone appear contemporary with the formation of these stratified rocks, and injected while they existed in a semi-consolidated state, or as layers of mud, gravel, and sand in the ocean's bed; for the greenstone is sometimes curiously and intimately blended with them to a considerable extent, and partakes of their bedded structure, as in the vicinity of Tarputri, Kurnool, &c.

Little mineralogical difference has been remarked, up to the present, in the traps of these two epochs; but the subject is now mooted, I believe, for the first time. I have observed in the dykes of the sandstone and limestone south of Chittywauripilly, in the Ceded Districts, and near the diamond mines of Banganpilly, a reddish foliated mineral, in oval cavities, resembling light red carnelian in appearance and semi-translucency, which has not fallen under my notice in the older dykes. There is also more calc spar (and occasionally selenite) in the former, and a greater tendency to a regular

prismatic and jointed structure. Both these traps resemble, mineralogically, the older traps of Europe, consisting chiefly of basaltic and porphyritic greenstone, rarely running into amygdaloid. I have never seen the older basaltic greenstone of the post-hypogene period become amygdaloidal.

Enough perhaps has been said to justify the division of the basaltic greenstone into at least two epochs, neither of which have been observed to continue into the tertiary period, to which I am about to refer the great Overlying Trap—a rock often confounded with the foregoing.

AGE OF THE NEWER OR OVERLYING TRAP.

The principal eruption of the newer or overlying trap is referable to an epoch in the tertiary period between the deposition of the freshwater limestones and that of the laterite; for it is seen in the Nirmul hills in the vicinity of Ingliswara, breaking up, altering, and entangling blocks of the former, while the latter rock reposes on it unpenetrated and unaltered, and often imbed fragments of the trap.

The elevation of the trap from the bed of the ocean was contemporaneous with that series of efforts which elevated the granite and laterite of the Western Ghats. Numerous dykes throughout the great extent of trap show that it also is not the product of one great eruption.

Some geologists have confounded it with the older basaltic greenstone associated with the granite and hypogene rocks of the more southern parts of India. It is, however, not only most strikingly distinguished from this rock in a mineralogical point of view, as will be seen on reference to the descriptions of the two rocks, but it invariably occupies a superior position, whenever seen in contact, as in the last woodcut. Another striking difference may also be noticed,—viz., that of the basaltic greenstone never having been observed to cover the rocks it intersects in sheets; the dykes usually ending abruptly at the surface, without spreading laterally. I have never seen it invading rocks of a more modern origin than the Pondicherry limestone or the diamond sandstone; whereas the overlying trap has broken up, and altered the freshwater tertiary limestones of, Nirmul.

It appears clear, from what has been urged above, touching the age of plutonic and volcanic rocks, that at least three great epochs of elevation may be marked in the chronology of Indian rocks, independent of those attending the eruptions of basaltic greenstone in the hypogene and diamond sandstone periods.

The first—*anterior to the diamond series, by which the hypogene schists were rendered crystalline, and partially subverted.*

The second—*posterior, during which a newer granite was erupted through fissures in the older, and which altered and disturbed the diamond series.* From the circumstance of the upper sandstone's occasionally resting on the limestone in less disturbed strata, it is inferred that the limestone underwent some degree of dislocation prior to the deposition of the former, and consequently that two movements took place during this epoch. There can be little doubt, from the unaltered yet highly inclined position of some of the beds of the diamond series resting on the granite, that much of the latter was protruded in a solid form. Other beds are seen equally inclined with marked alteration,—a fact significant of a highly heated yet solid state of the granite. Some beds, at short distances from the foci of this second plutonic disturbance, are seen reposing nearly horizontally on the hypogene rock, or older granites, unaltered, evincing an elevation on the solid rock attended with little local violence.

The third movement, or rather series of movements, by which a great part of Southern India was slowly and gently elevated to its present height above the ocean, took place, probably, as described in speaking of the Ghaut elevation, during the tertiary period.

These last elevatory forces are attributable rather to volcanic than plutonic activity, since no granite has been yet observed intruding into, or altering tertiary rocks; and the granites of both the epochs just described have been uplifted by them in a solid form. The phenomena of the third movement are possibly connected with those attending and following the grandest basaltic eruptions in the world, viz., those which produced the overlying trap formation of India. The expansion by heat, and gaseous extrication resulting from so vast a body of molten lava, heaving for vent beneath a ponderous crust of granite, &c., seems adequate to produce such effects. In cooling, the portions of the mass still immediately below this crust would naturally contract, and we should expect to find a corresponding subsidence of surface, unless the spaces, as left vacant, be constantly filled up by the pressure of molten matter from regions still nearer the nucleus of our orb.

The numerous hot springs in and around the basaltic region of India are possibly connected with these phenomena, and a register of their temperature might afford indications of the decrease or increase of the subterranean heat, whether thermal or volcanic. Some indications afforded by the tepid springs of the Kurnool and Banganpilly diamond formation incline one to think that, in that area, a decrease

of heat has taken place; but I do not consider these experiments as at all conclusive (Vide Bengal Journal, 1844, No. 148). A register on the rocks on the coasts is also desirable, to ascertain whether there is any general or local subsidence or elevation of surface now in progress. It is almost needless to add that, during these epochs of plutonic and volcanic activity, the surface of India underwent those oscillations necessary to the formation of its successive aqueous strata, to the consolidation of which the plutonic and volcanic heat mainly contributed. During these oscillations, the denudations, of which I have endeavoured to show proofs, must have occurred.

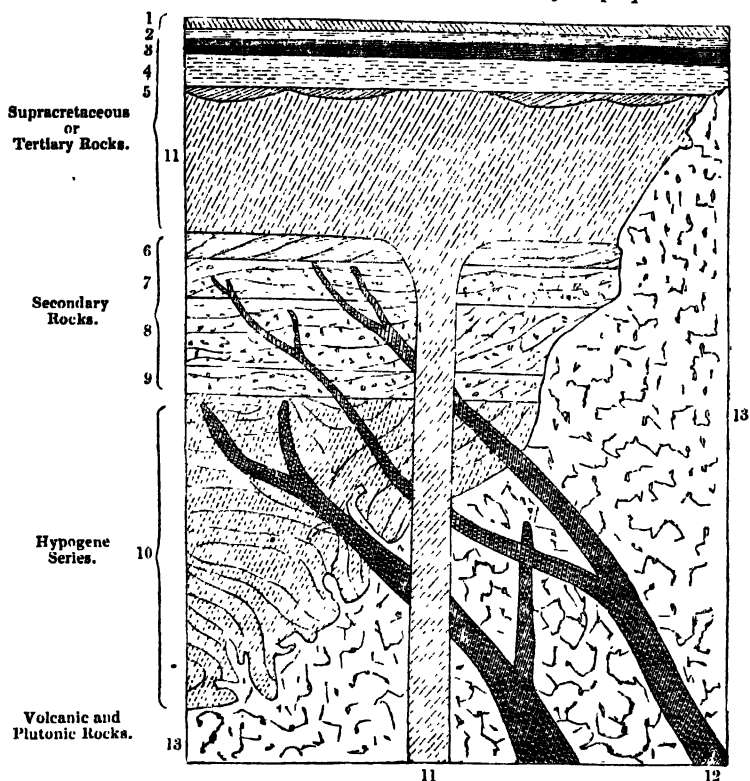
CONCLUDING REMARKS ON THE CLASSIFICATION OF THE STRATIFIED ROCKS OF SOUTHERN INDIA.

SUPRACRETACEOUS OR TERTIARY ROCKS.

No. 1. Marine Sandstone of Coromandel.—In the synoptical table of superposition, the marine sandstone of the Coromandel coast overlies the regur, although the former was described, for the sake of convenience, first in the ascending order adopted. It was there stated that these scanty and detached beds, consisting of a loosely agglutinated sandstone, imbedding existing marine shells, were raised to their present position during the same period as the laterite. It must be remarked here that this observation must be understood as applying exclusively to the latest periods of the elevation of the laterite. These marine beds have never been found at any great distance from or elevation above the sea.

Since the paper containing the description of this marine sandstone was sent to England, General Cullen writes me that the beds of it at Cape Comorin form a stratum on the beach some ten or twelve feet thick, resting on granite which occupies the water line, and which extends out to sea in large bare rock masses and islets. Above the sandstone is a hard, close-grained, cream-coloured and reddish limestone, also full of shells, which much resemble those in the sandstone, and those at present thrown up by the sea on the adjacent beach. The limestone can be traced inland perhaps a mile from the sea, and a hundred and fifty feet above it. The Residency stands on a bed of it, about two hundred yards from the sea, and sixty feet above it.

Nos. 2 and 3. Coromandel Black Clay, Regur, Ancient Kunker, and Gravel.—Underneath the alluvial sands and clays on which stand

Synoptical Table of the Rocks of S. India in order of Superposition.**SUPRACRETACEOUS OR TERTIARY STRATA.**

- 1—Sandstone of Coromandel and Paumbum, and Cape Comorin, imbedding existing marine shells.
- 2—Coromandel Black Clay underlying Madras, &c., and Regur (Pliocene period).
- 3—Ancient Kunker, and Gravel imbedding Remains of Mastodon (Pliocene period).
- 4—Silicified Wood Deposit of Pondicherry, and older Laterite (Miocene period).
- 5—Freshwater Limestone of Nirmul, Hyderabad, and Rajahmundry (Eocene period).

SECONDARY STRATA.

- 6—Limestone beds of Trichinopoly, Verdachilum, and Pondicherry (Neocomien or Lower Chalk).
- 7, 8, and 9—Diamond Sandstone Group—8 is the Limestone, and 9 the lower Sandstone. (Carboniferous or Devonian.)

10—HYPOGENE SERIES.

Clayslate
Quartzite
Talcose
Chloritic
Actinolitic
Hornblende
Mica Schists
Gneiss
Protogine
Kunite
Serpentine.

VOLCANIC AND PLUTONIC ROCKS.

- 11—Newer or Overlying Trap.
- 12—Basaltic Greenstone.
- 13—Granite
Syenite
Syenitic Granite
Pegmatite
Porphyritic Granite
Protogine
Kunite
Serpentine
Diallage.

the cities of Madras and Pondicherry, and underlying the recent marine sandstone in many other situations on the coast of Coromandel, is a remarkable bed of a bluish-black clay, which strikingly resembles the regur, if not identical with it, and in which lie entombed the remains of existing marine exuvie. Below it and the regur we often find a bed of ancient kunker associated with and often agglutinating beds of gravel, in which the remains of the mastodon have been found at Hingoli. While these beds apparently belong to the pleiocene period, the marine sandstone may probably be referred to the post-pleiocene, although at present included among the tertiary strata. The more modern depositions of kunker belong of course to the historical epoch, and occupy no place in the table.

No. 4. Laterite and Silicified Wood Beds.—Next in order come the silicified wood beds of Pondicherry, and the older laterite, which may rank with the lignite and siliceous deposits of the miocene period. The lateritic sandstone imbedding lignite at Beypoor closely resembles the description given¹ of the brown coal formation on the banks of the Rhine, which “consists of loose sand, sandstone, and conglomerate, clay with nodules of clay ironstone, and occasionally silex. Layers of light brown and sometimes black lignite are interstratified with the clays and sands, and often irregularly diffused through them. They contain numerous impressions of leaves and stems of trees.”

No. 5. Freshwater Limestones and Cherts of Nirmul and Hyderabad.—These cypriferous beds have been invaded and altered by the newer trap; and, from their imbedding a number of freshwater shells, of the genera physa, paludina, unio, linnea, melania, &c., chiefly of species which no longer exist, may be classed perhaps among eocene strata. Like the eocene freshwater beds of the Cantal, they abound in gyrogonites, and the genera of the prevailing shells assimilate. Both have been invaded and altered by ancient volcanic eruptions, and abound in layers of flint and chert. The Rajalundry beds near Peddapungoli and Govinpatnam may be referred to the same period.

Before quitting the tertiary beds, it may be briefly mentioned that I have recently discovered, in some caves in the diamond limestone of Kurnool, at Billa Soorgum, on its southern boundary, fragments of bones and tusks, and innumerable bones of bats, &c., fossilized with carbonate of lime, sulphate of lime, and iron, at depths of from eight to twenty feet below the surface, in a bed of reddish marl, indurated

¹ Lyell's Elements, Vol. II. p. 280.

to the hardness of travertin, with nests of crystallized sulphate of lime. The floor of the caves is in general covered by a brown dust, formed by the decomposition of bats' dung, overlying a crust of stalagmite, underneath which lies a bed of mud earth, indurated calcareous clay, and the bone breccia.

SECONDARY ROCKS.

No. 6. Cretaceous Limestones of Verdachellum, Trichinopoly, and Pondicherry. The fossils of these beds clearly identify them with the cretaceous system of Europe. Those of Pondicherry appear to rank with the neocomien or lowest beds of the chalk series. Many new forms have been discovered in their fossils, which, it is anticipated, will serve in turn to illustrate and throw new light upon our theories regarding the disputed relations of the cretaceous group with its neighbours.

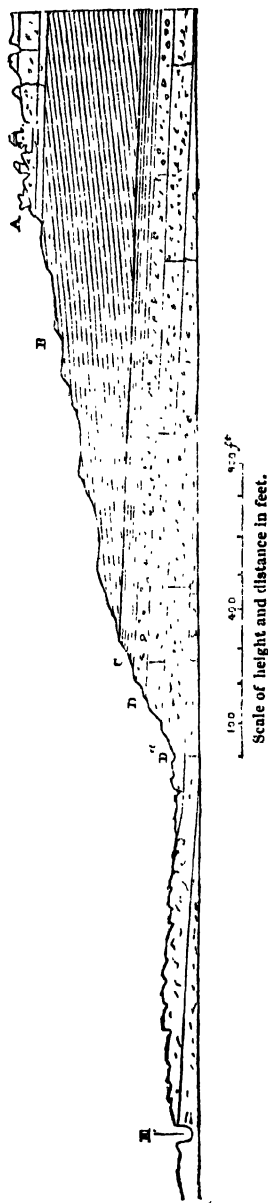
Nos. 7, 8, and 9. Diamond Sandstone and Limestone Group.—Although no natural section exhibiting the superposition of the chalk beds has hitherto been discovered, still, for reasons which have been stated in detail, it has been thought advisable to place the diamond sandstone group below them. Since the paper on the latter rocks was sent to England, I have found a second bed of sandstone underlying in conformable stratification the limestone and the sandstone stratum which caps it, a section of which is shown in the next page. The thickness of the beds I ascertained by trigonometrical observations.

The fissure in the lower sandstone at E, at the bottom of which lie the thermal springs and temple of Moodelaity, presents an imposing feature in the landscape, with its precipices, cliffs, and deep ravines; and in the true scale of height and distance on which the section is drawn, its relative importance is greater than that of the loftiest mountains and deepest theoretical researches of geologists, when compared with the earth's entire bulk. The true amount of dip, ascertained by a clinometer by Chevalier of Paris, is also retained in the section.

The lower bed of sandstone is distinguished from the upper by the absence of the fragments of chert and jasper from the limestone, which abound in the conglomerates of the latter.

The pebbles found in the lower bed are chiefly of white quartz, stained superficially by oxide of iron, which also penetrates into the microscopic chinks by which they are often intersected. A few pebbles of the hardest and toughest portions of the granitic and basaltic greenstone or hypogene rocks on which it rests, viz., quartz, hornstone,

*Section of Diamond Sandstone Group.
Pass of Moodelatty, Kurnool, Southern India.*



A—Compact light-coloured sandstone passing into quartz rock and conglomerate—120 feet thick.

B—Beds of limestone compact, of light tints of green, red, and buff, often lined with dark red jasper and light-coloured cherts—thickness 310 feet.

C—Calcareous and argillaceous shales, usually reddish, chocolate,

and liver-coloured passing into white; surfaces of laminae often covered with small light green (chloritic?) flakes.

D—Laminar sandstone; micaceous scales between layers.

Dd—Sandstone, massive.

E—Fissure, at the bottom of which are the temple and thermal springs of Moodelatty.

basalt, and lydian stone, and actinolitic hornblende, are scattered here and there. The softer portions have been ground down into the ordinary mass of sandstone, where they can still be traced in the coarser portions. The iron ore veins in the subjacent rock have yielded the colouring matter.

In the light coloured chert and red jasper veins and beds which intersect the limestone I have recently discovered at Nurnoor and other parts of Kurnool, Cuddapah, and the Hyderabad country, myriads of small subglobose and spheroidal siliceous bodies, often in such numbers as to compose the entire substance of the rock. The sections of these bodies to the naked eye appeared like those of nummulites; but, under a lens, exhibited a decidedly concentric structure, resembling somewhat that of the *Stromatopora concentrica*, a fossil of the limestones of the Eifel and Dudley, figured by Goldfuss, rather than the convolute spiral organization of the nummulite.

In some, the internal structure is very distinct; in others, obliterated more or less, and filled up with the imbedding chert or jasper. Their external spheroidal shape has, in many instances, been flattened, and otherwise altered by pressure.

In weathering, these bodies fall out from their matrix, leaving its surface completely variolated with the innumerable small cavities they occupied, and which bear the impress of their form. They are only discernible in the finer and more siliceous portions of the limestone, though there can be little doubt of their existence in the opaque mass. Doubts are entertained as to their being truly organic; but the great regularity and peculiarity in the structure of these myriads induce me to hesitate, for the present, in classifying them among ordinary concretions or crystalloids.

Christie classed the sandstone with the old red, and the limestone of this group with the hypogene rocks, in the transition series, apparently on the grounds of its supposed mineral resemblance to the transition limestones of Werner, and from its usually inclined stratification in the situations in which he observed it; but I think, from what has before been stated, that we are not warranted as yet in placing it with the sandstones lower than the carboniferous or the Devonian groups.

No. 10. *Hypogene Strata*.—Christie, for the reasons just stated, classed the hypogene strata of the Southern Mahratta country among the transition rocks of Werner. Others (as I did) have called them primitive, from the supposition of their great antiquity, founded upon their non-fossiliferous and highly crystalline character—usually highly inclined strata—and their reposing directly upon granite. Latterly

it has been found that the hypogene strata are rocks of various ages, from the Cambrian to the tertiary, acted upon, rendered crystalline, and mineralogically altered by the effects of plutonic heat; hence the terms of metamorphic, or crystalline, schists often applied to them. All traces of organic bodies in the fossiliferous schists thus metamorphosed are supposed to have been obliterated by the action of the heat, especially in those next the plutonic rocks, or nearest the foci of plutonic intensity. At a distance, the schists become less altered, and gradually re-exhibit their truly fossiliferous character.

I am not aware that undoubted organic bodies have ever been discovered in gneiss, which is usually the lowest rock in the system; but Elie de Beaumont has exhibited to the astonished upholders of the primordial origin of those crystalline rocks, belemnites entombed in micaceous and chloritic schists!

Keilhaus has proved some of the supposed primary crystalline rocks of the north of Europe to be altered fossiliferous strata; while those accomplished geologists, De la Beche, Hoffman, Boué, and others, have demonstrated that the marble of Carrara is nothing but an altered limestone, of the secondary period, belonging to the oolite; and I am inclined to believe, from personal observation, that the celebrated marble of Paros is merely the altered lower or cretaceous limestone of Asia Minor and Mitylene. Hence we may have a secondary and tertiary gneiss, as we have granites of these periods.

But the question here is, whether the hypogene rocks of Southern India are the altered sandstones, limestones, and shales of the diamond group, or those of a more ancient epoch. The circumstance that no fragments of any rocks intervening between it and the granite have been found in the lowest sandstone, added to that of its being the next lowest in succession to the hypogene series, might be considered as arguments in favour of the sandstone groups having been thus metamorphosed; but it may be urged in answer, that an older series of rocks might have been completely metamorphosed before the deposition of the diamond sandstone; in which case nothing beyond their altered fragments would appear in the composition of the sandstone, which is the fact.

The lime which furnished the material for those large sheets of ancient kunker we see deposited over the surface of great part of India by the waters of springs (many of them now thermal) rising up from the bowels of the earth, may have been derived from beds of limestone in these ancient strata while under the action of plutonic heat. Its abstraction may serve to account for, in part, that great deficiency of crystalline limestone, or marble, so remarkable in the

hypogene series of Southern India; and the decrease of the kunker deposit appears to have been contemporaneous with that of plutonic or volcanic activity.

I know not where to look for a remnant of these ancient strata in their unaltered state, save perhaps in the clay slates of the Southern Mahratta country, the relations of which with the diamond sandstone, limestone, and hypogene schist are of considerable intricacy. No fossils have hitherto been found in these rocks.

The whole of the oolite, lias, and Silurian beds appear at present to have no representatives in Southern India, and there is a great deficiency of the carboniferous, Devonian, and other fossiliferous strata. This deficiency, as stated before, while it renders the geology of Southern India uninteresting to the palæontologists of Europe, is in itself a subject for profound research in physical geology.

It is true that Southern India has not yet been fully explored, and that these beds may still be discovered; but sufficient has been elicited to prove *at least* their extreme scantiness relatively to the vast extent over which they are spread, especially the Silurian beds, in Northern Europe. The Silurian strata have been found in North America occupying large areas, in some parts of South America, in the Falkland Islands, and at the Cape of Good Hope; and the gifted founder of this system of rocks is, with reason, sanguine in his anticipations of planting the Silurian standard on the rocks of China, which have already exhibited such magnificent proofs of their carbonaceous treasures on the quays of Nankin.

Like the boulder formation, the older palæozoic strata appear to thin out and diminish as we approach the equator. I have searched in vain for them and boulders on the southern and eastern sides of the Mediterranean, in Egypt, around the shores of the Red Sea, and, nearer the equator on the Malay peninsula.

CONCLUSION.

I have too long trespassed on the patience of the Society to take up much more of its time; but a few words in explanation and apology for the extremely imperfect state in which this Summary of Southern Indian Geology has been offered to its notice, are indispensably necessary in self-defence.

It may be premised, without detriment to their acknowledged talent, that the observations from which it has been compiled, and also

my own, are those of amateurs (with the exception of Voysey); chiefly self-taught employés of Government, with pressing and onerous calls of duty constantly to respond to; next, that the out-door geologist labours under incalculable disadvantages in exploring a tropical country, not only from climate, but from the dense vegetation which clothes its features, and from the few artificial sections, such as mines, quarries, &c., which present themselves in European countries.

The sun's heat admits but of a very few hours' exposure with safety in the early and closing parts of the day: our best and most distinguished geologists—Voysey, Christie, and Benza—have all fallen victims, directly and indirectly, to the effects of climate, in their devotion to geological science; and last, though not least lamented, my excellent friend Malcolmson, who has recently succumbed under a deadly disease, contracted while exploring the geological treasures of the valleys of the Nerbudda and Taptee.

My own notes have been made during a period of sixteen years' service; by the road-side, when marching; or in tracts less frequented, while on sporting excursions, when the hammer, compass, and clinometer accompanied the gun and spear; for I deemed it possible, even for those who run, to snatch a glimpse from nature's book.

The heights laid down in the sections across the peninsula, in absence of a barometer, were taken roughly by the approximative method of the boiling-point; with the exception of a few barometrical measurements obtained from General Cullen's well known table of altitudes, and the height of the Nilgherris, from Dr. Baikie's barometrical observations.

It was intended to have annexed a geological sketch map of Southern India to this Summary; but circumstances have delayed its completion, although the work was far advanced.

The geological notes would have been continued probably some years longer, and offered to the Society in a more ripened and perfect state; but official duties would not admit of their being further pursued. They have been taken as opportunity admitted, and consequently without reference to the general system and method which should be observed in making a comprehensive geological survey of any large tract of country.

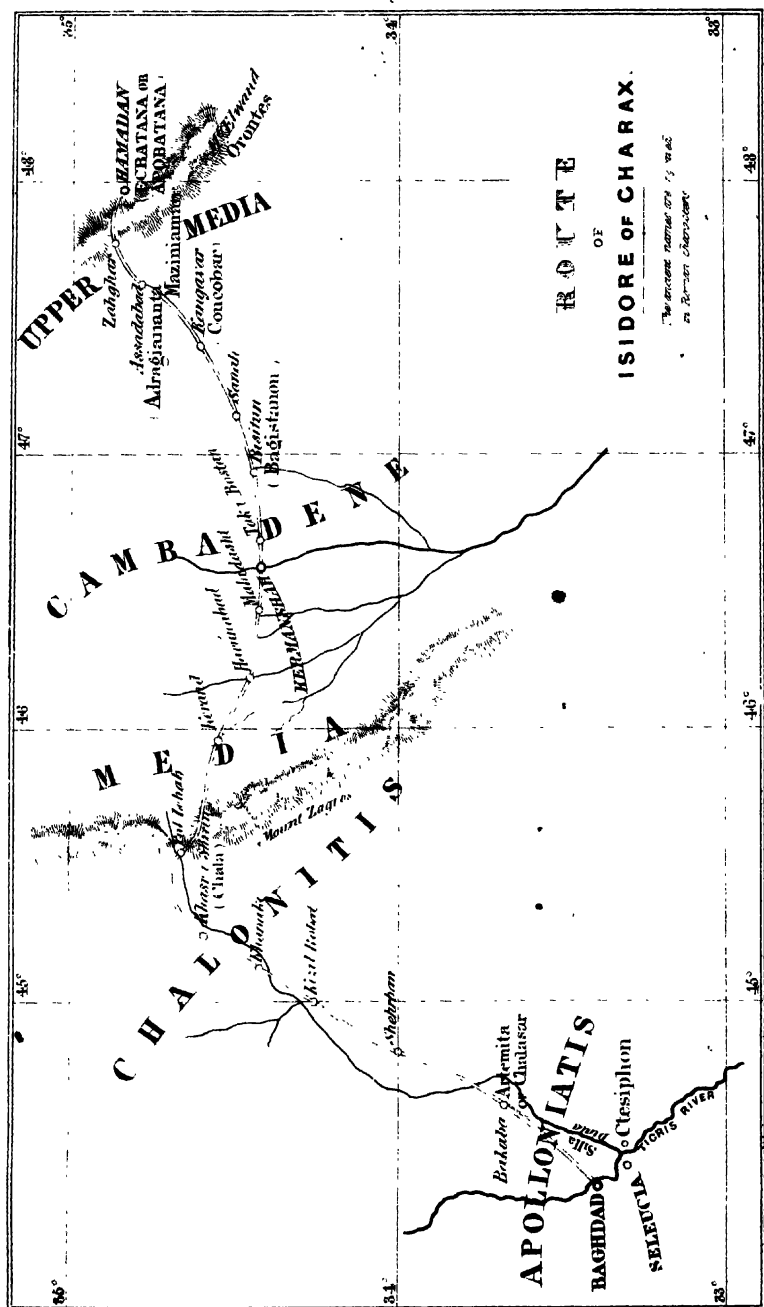
With regard to the classification which I have ventured to indicate for Indian rocks, it must be distinctly understood that such arrangement is entirely provisional; and one to which I would fain draw the attention of future and more able observers to rectify, correct, or confirm; for, as yet, I consider we are but on the threshold of Indian geology. The late talented President of the Geological Society, Mr.

Murchison, in his luminous *exposé* of the state and advancement of geological science in various parts of the world embodied in his Anniversary Address for 1843, when speaking of Hindostan, Afghanistan, and China, observed that "Long as Hindostan has been attached to the British Empire, vast lacunæ remain to be filled up before a general geological map of this peninsula can be published; and yet in no part of the earth over which British rule extends is an adequate acquaintance of the subsoil more required. Viewing it as the great centre of civilization of the East, I should hail the day when its Governors, employing competent geologists, shall direct a comprehensive inquiry to be made into the whole of its mineral structure, the results of which must prove to be of the highest national value."

After adverting to Afghanistan, the President turns to China, expressing his confidence that so vast a region may not be laid open to British enterprise without bringing to us some accession of natural knowledge; and after alluding to the coal of Nankin, and the facilities of inland navigation in that part of China, he expresses his opinion, that, by acquiring a thorough acquaintance with the carboniferous sites of China (which is indispensable for a people like ourselves, whose commercial and maritime advancement depends so essentially upon the application of steam power), we shall at the same time obtain a general insight into the physical and geological relations of her rocks. "I would even suggest that agents, possessing sufficient knowledge of coal-fields and mining wealth, should be attached to those permanent stations which are to be occupied by our forces; whence, if a friendly spirit of intercourse is continued, excursions could be made into the interior. Thanks to the diffusion of knowledge, our rulers can now have no difficulty in procuring much useful geological information, even by directing their own officers to make the inquiries within their reach; and if Consuls cannot be found, who, to a familiarity with statistics, add the powers of scientific research, it is at all events well known that our highly instructed corps of Royal" [and I may add H. E. I. C.'s] "Engineers contains within it several good geologists. Let, therefore, British statesmen encourage our science; and, casting their eyes around our vast colonies, apply to them some measure of that geological research which they are so judiciously and liberally patronizing in our own islands."

There is no necessity to call upon the Royal Asiatic Society to echo such enlightened sentiments as these; or upon the Indian Government—the most munificent patrons of science in the world—to back them whenever the time arrives, and fitting opportunity occurs.

For myself,—in bidding farewell to Indian geology, and taking my leave of the Society,—I have to offer it my best thanks for the patience with which it has heard me; feeling assured that it will extend every indulgence to the errors and incapacity of an individual whose labours in the field have been those of pure zeal and love for the science.



Smith, James & Son, London.

ART. III.—*Illustration of the Route from Seleucia to Apobatana, as given by Isidorus of Charax, by C. Masson, Esq.*

Read November 15, 1845.

AMONGST the many works of antiquity whose loss we have to deplore, are those of the historian of Charax. Some of them, if our good fortune had permitted their preservation, would have diffused a strong light upon the study of Oriental subjects, which owing to the progress of research and discovery at home and abroad, is prosecuted with increased ardour by the learned throughout Europe. His Parthic history, for example, was a work which to us would have been invaluable. Amongst the fragments of his composition remaining, is, however, an Itinerary of a route through the principal parts of Asia, an ancient relic of exceeding worth, and which, from its perfect accuracy, cannot be sufficiently commended.

I have, in the present instance, selected merely a portion of it for examination, and was induced to the task by the perusal of the Reverend Archdeacon Williams's Memoir on the Geographical Position of Ecbatana, and by the circumstance of having travelled the route which I pretend to explain. The Reverend Archdeacon tenders ample justice to the merit of Isidorus; and although I differ from the general conclusion drawn by him in his Memoir, and must protest against the use to which he applies the Itinerary in question, it behoves me to avow the pleasure with which I perused that labour of research, and even my gratitude for the mass of valuable information collected in it.

Had my examination no other object than to invalidate the inference insisted upon in the Memoir alluded to, viz., that of Ispahan being the modern representative of the ancient Ecbatana, it might perhaps with justice have been deemed unnecessary;—but as the route is otherwise one of high interest, and will, if correctly illustrated, reflect a degree of illumination upon many points of ancient geography, as well as upon many important vestiges and monuments of antiquity still existing in the countries to which it relates, I feel assured that the task of investigating its details will neither be considered misapplied or unprofitable.

The route commences at Seleucia, the site of which is fortunately well known, and terminates at Apobatana, the royal city of the Medes. There can be no doubt that the latter city is the celebrated Ecbatana,

which, although formerly referred to Tauris or Tabreez by even eminent scholars, has latterly by general consent, (the Reverend Archdeacon, indeed, forming an exception,) been ascribed to Hamadan.

The country between Seleucia and Apobatana is in much the same condition at the present day, as it appears to have been in the time of Isidorus. The tract extending from Seleucia to Mount Zagros presenting chiefly a level expanse of desert, interspersed with fertile and cultivated patches, in which the towns and villages are situated at considerable distances from each other. By these clusters of population the stations and marches were necessarily regulated or influenced in ancient as well as in modern times. The peculiar physical features of the tract are consequently favourable to the comparison of any route through it, the chances of error in fixing the several localities being in great measure trifling or restricted within very moderate limits.

The distances in the Itinerary of Isidorus are estimated by a certain measure, the *schœnus*,—the value of which it is necessary to determine, before proceeding with our enquiries. The various geographers of antiquity have left no doubt that the *schœnus* was of very different lengths in the several countries in which it was employed, or that it fluctuated as much as the mile or the league in European countries now. The testimony of Strabo upon this point is clear, and moreover useful, as indicating in its lesser quantity, the *schœnus* by which, in all probability, Isidorus computed. Strabo writes that "The Persian parasang is estimated by some authors at sixty stadia, but by others at forty or even only at thirty stadia. When I ascended the Nile, I found the distances between towns computed by *schœni*, but the measures of these *schœni* were not everywhere uniform, so that the same number of *schœni* sometimes designated a greater, sometimes a less actual extent of road, a variation which dates from the earliest time and exists in our days." The Reverend Archdeacon Williams has calculated the *schœnus* of Isidorus at three miles and a quarter. I have little hesitation in supposing it to have been the smaller of the *schœni* in use, and that it was equivalent to two English miles and a half; admitting, however, the possibility that the *schœnus* employed by Isidorus between Zeugma and Seleucia, on which the learned Archdeacon based his calculation, may have varied from that used by him between Seleucia and Apobatana; which, without having verified by investigation, I may yet affirm was possible.

That the smaller *schœnus* was adopted even by the old geographers, we learn from Strabo himself, who immediately before the passage just quoted, cites Patrocles as asserting that the distance between the mouths of the Jaxartes and the Oxus, was eighty parasangs (*schœni*).

We also find that Eratosthenes estimated the same distance at two thousand four hundred stadia. This sum divided by thirty yields eighty, or the number of parasangs or schœni specified by Patrocles. The latter consequently with Eratosthenes calculated by the smaller schœnus, as did Isidorus according to our conception.

The distance between Seleucia and Apobatana, as gathered from the Itinerary of Isidorus, was one hundred and twenty-nine schœni, or by our computation, three hundred and twenty-two and a-half English miles. The city of Seleucus, it is well known, has long ceased to exist, and its site is occupied as well as evidenced by shapeless mounds. As the capital of Mesopotamia, it is now represented by Baghdad, which, distinguished by its Moslem characteristics of gilded domes and lofty minarets, stands forth on the plain where once arose the cities of the Seleucidan and Parthian kings, their successor in provincial dignity and rank.

The high road which in former days led from Mesopotamia into Media, now therefore leads from Baghdad, as it did once from Seleucia, and as the present city and the ancient site are situated on the same river, the Tigris, with but an interval of a few miles between them, the road is essentially similar, and, as will be shown, the several stations, with the necessary exceptions of one or two at the commencement, accord, whether in the ancient or modern route.

If while assuming the value of the schœnus of Isidorus to be two miles and a-half, I confided in the computations of Patrocles and of Eratosthenes, as transmitted to us and sanctioned by Strabo, it was satisfactory to find the assumption borne out and justified by modern authority. The Itinerary of Isidorus, in giving one hundred and twenty-nine schœni as the sum of the distance between Seleucia and Apobatana, assigns the respective extents of the several provinces which it traverses, to be as follows:

Extent of Apolloniatis	33 schœni.
Chalonitis	21 „
Media	22 „
Cambadene	31 „
Upper Media	22 „
Total	<u>129 „</u>

This total, as before said, multiplied by two and a-half, yields the sum of three hundred and twenty-two miles and a-half English.

The line of road from Baghdad to Hamadan, as measured by Mr.

Webb, the surveyor attached to the mission of the late Sir John Macdonald, singularly coincides in its sum with that which we have here obtained for that of Isidorus, by estimating the schœnus at two miles and a-half. Great respect may be entertained for any results gained under the direction and superintendence of Sir John Macdonald, whose character for accuracy in all practical operations was no less distinguished than merited. I have therefore preferred Mr. Webb's estimate of the distances of the route, remembering that his labours secured the full approbation of his employer and patron. There are many others, in which the distances have been computed by the number of hours travelled, which of course vary more or less from that of Mr. Webb and with each other, still it is obvious their results should not be compared, as regards their approximation to exactitude, with those arrived at by positive admeasurement by means of the perambulator, carefully attended to.

MR. WEBB'S ROUTE FROM BAGHDAD TO HAMADAN.

From Baghdad to Bakuba	35 miles.
Bakuba to Shehrban	27 „
Shehrban to Kizil Robot	18 „
Kizil Robot to Khanakí	18 „
Khanakí to Khasr-i-Shirín	22 „
Khasr-i-Shirín to Púl Zeháb	22 „
Púl Zeháb to Kerand	29½ „
Kerand to Harúnabad	20 „
Harúnabad to Máhidashat	21 „
Máhidashat to Kermansháh	14 „
Kermansháh to Bisitún	20 „
Bisitún to Sánah	16 „
Sánah to Kangavár	16 „
Kangavár to Assadabad	22 „
Assadabad to Hamadan	23 „
Total	<u>323½ „</u>

It would be unjust that more than due stress should be imputed to the coincidence manifested in the sums of the distances specified in the above routes. Although the aggregates so nearly agree, it may be observed, and will be hereafter pointed out, that as regards particular stations, slight variations occur in some instances. This is as it should be; for it was impossible that the distances in a route which were

estimated or obtained by methods so different, and even calculated from distinct points, although near ones, should be precisely identical; for, in that case, both might have been liable to distrust. Neither is it wished to contend for the superior accuracy of either distance, of that of Isidorus or of Mr. Webb. The latter gentleman's results, determined by the perambulator, could only be as exact as the instrument permitted, while it is obvious those of Isidorus, broadly estimated by so large a measure as the schœnus, and he never divides it, cannot claim to be considered accurate. The general accordance, however, has its value, and is very satisfactory; while it inspires us with corresponding confidence to proceed in our examination of the details of the route, which I shall submit with the translation of the learned Archdeacon.

APOLLONIATIS.

Ἐντεῦθεν ἄρχεται ἡ Ἀπολλωνιάτις, ἥτις κατέχει σχοίνους λγ'. Ἐχει δὲ κόμας, ἐν αἷς σταθμὸς, πόλιν δὲ Ἑλληνίδα Ἀρτέμιτα'. διὰ μέσης δὲ ταύτης ῥεῖ ποταμὸς Σίλλα. Εἰσὶ δὲ εἰς αὐτὴν ἀπὸ Σελευκείας σχοῖνοι ιε'. Νῦν μὲντοι ἡ πόλις καλεῖται Χαλάσαρ.

"Hence (from Seleucia) commences Apolloniatis, 33 schœni broad. It contains villages in which there are stations, and a Greek city, Artemita, through the middle of which flows the river Silla. It is 15 schœni distant from Seleucia—the present name of the city is Chalasar."

The fifteen schœni of Isidorus, noted as the distance between Seleucia and Artemita, or Chala-ar, are equivalent to thirty-seven miles and a half. From Baghdad to Bakuba, by the modern route, is thirty-five miles. Although the last-mentioned place in these days may be considered the humble representative of Artemita as a stage-town on the great Median road, it is unnecessary that it should occupy the exact site of his predecessor, which indeed it cannot do, as we are told that the river Silla flowed through it, whereas we have to cross that river, now called the Diála, before Bakuba is reached, as it is built some little distance beyond it. The presence of the Diála is, however, of consequence, inasmuch as the Archdeacon, in support of his theory upon Ecbatana, wished to remove it considerably to the east, and suspected that it was laid down in maps upon mere conjecture.

¹ V.R. Ἀρτάμινα.

Artemita is called by Strabo a remarkable city, and he notes it as five hundred stadia distant from Seleucia, which would be about forty miles, a little in excess to the measure of Isidorus, although there are some readings of the latter which give sixteen instead of fifteen schœni, when the two authorities would perfectly concur. The site of this city, while it has not been positively determined, has yet, with great semblance of probability, been conjectured to be that of Karastar, seven miles to the east of Bakuba, where exist remains by far the most considerable as to extent and magnitude of any in that vicinity. Not only do their distance and bearing from Seleucia confirm the conjecture, but it is rendered nearly certain by the information supplied by Isidorus, that in his time the name of Artemita had been replaced by that of Chalaras, an appellation too nearly resembling Karastar to escape notice, even if this last should not have been written Karasar, which is, I think, not unlikely. As I did not visit the ruins of Karastar, I avail myself of the record of them by the Hon. Mr. Keppel, and I doubt not that he beheld in them the remains of the Artemita of the Greeks and of the Chalaras of the Parthians. Baghdad is twenty miles NNW. of Seleucia, therefore the high road into Media from the latter city was necessarily at its commencement, carried a little to the east of, although nearly parallel to, the present one. Karastar is said to be the name by which the Arabs know the locality, and its retention by the rude tribes of the plain offers one of the numerous instances by which original and ancient appellations have been similarly preserved.

The extent of Apolloniatis, more anciently called Sittacene, according to Strabo and others, is stated as thirty-three schœni, or eighty-two and a half miles, and this distance, estimating from Seleucia, would bring us exactly to Kizil Robat of the modern route, which it will be seen is eighty miles distant from Baghdad. In its immediate neighbourhood, therefore, was the boundary line between Apolloniatis and the next province or district. Between Bakuba and Kizil Robat at the present day is Shehrban, with numerous vestiges of ancient civilization in its environs, some of them of sufficient importance to arrest attention, especially the vast mounds and ruinous walls of Eski Baghdad, or Old Baghdad, about three miles to the north of the village. There is a strong presumption that we there recognize the remains of the ancient Apollonia, the Seleucian capital of the province, which, from the silence of Isidorus, we may suspect had dwindled into insignificance under Parthian rule, or, like Artemita, had changed its name. The neighbourhood of Kizil Robat is likewise fertile in ruins of great magnitude and of equal interest, and, in common with so

many localities on the great plain of Babylonia, exhibits vestiges of existence throughout divers periods of antiquity.

CHALONITIS.

'Εντεῦθεν ἡ Χαλωνίτις' σχοῖνοι κα'. 'Εν ἡ κῶμαι εἰ. ἐν αἷς σαθμοῖς, πόλις δὲ 'Ελληνίς Χαλά, ἀπὸ τῆς 'Απολλωνιάτιδος ἀπόσχοινοι ιε'. Εἴτα ἀπόσχοινοι εἰ ἕως ὃ καλεῖται Ζάγρος, ὅπερ ὕρίζει τὴν Χαλωνίτιν' χάραν καὶ τὴν τῶν Μήδων.

"Thence Chalunitis, 21 schœni broad. There are five villages in it, where there are stations, and a Greek city, Chala, 15 schœni distant from Apolloniatis. Five schœni distant from it is Zagros, which forms the boundary between Chalunitis and the country of the Medes."

In conformity to this very distinct statement of Isidorus, at the distance of fifteen schœni, or thirty-seven and a half miles from the boundary of Apolloniatis, was an important Greek city and station called Chala. It was, therefore, one hundred and twenty miles from Seleucia. If we refer to the modern route we discover that the same distance brings us to Khasr-i-Shirîn; and, if we might suspect from the coincidence that it denotes the site of Chala, we are more than sanctioned so to do from the nature of the remains at it, and we may feel nearly assured, if previously the modern and ancient high roads had not converged to the same point, that they effected a junction at this spot. The ruins at Khasr-i-Shirîn, and in the vicinity, extend for miles in all directions, and although it is not my purpose particularly to describe them, still the most prominent of them, it may be remarked, consist of massive walls, aqueducts of masonry, and vast residences and edifices once surmounted with domes, the walls of which are still nearly entire. At the distance of four or five miles from the point at which the high road passes these ruins, are very considerable structures, in a state of good preservation, to which I believe the appellation of Khasr-i-Shirîn is particularly applied by the natives of the surrounding country, and which, having reference to the romantic tales of Persia, need not be the subject of special notice or criticism, notwithstanding it is not improbable that such a situation may have been an occasional residence of the later Sassanian monarchs. It is satisfactory, however, to have good grounds for recognizing in the site that of the Greek city of Chala, although the widely-dispersed monuments of ancient magnificence and opulence, so far as occurred to my observation, are attributable to a comparatively recent epoch. In them we

¹ V.R. Χαλωνίτης.

² Χαλωνίτην.

behold not merely the remains of a large city, but of a strongly-fortified one, and the works and buildings are in so perfect a state, and on so large a scale, that we can but wonder that tradition is not more precise respecting them, for it is difficult to believe that the place has not been one of importance under the Caliphs, if not under their successors. I may offer a surmise, that we have at Khasr-i-Shirin the position of Holwan, in which appellation I observe a sufficient approach to that of Chalone to excuse being pointed out, and I further think that it is the Celonro of the historians and geographers prior to Isidorus, from whom we also learn why it should have been called a Greek city, when they inform us that Xerxes located at it a colony of Boeotians.

A deeper interest would attach to this spot, could the analogy of appellation permit the supposition that it is the Calah of Genesis, one of the earliest inhabited sites in the universe. "Out of that land (Shinar) went forth Ashur, and builded Nineveh, the city Rehoboth, and Calah. And Resen between Nineveh and Calah, the same is a great city." Gen. chap. x., v. 11 and 12. The analogy must not, however, blind us to the fact that Strabo has a district Calachène, distinct from our Chalonitis, whose pretensions to contain the site of the scriptural Calah have been pointed out by Calmet and others.

MEDIA.

Ἐντεῦθεν Μηδία, ἣτις κατέχει σχοίνους κβ'. Ἡ ἀρχὴ αὐτῶν καὶ χώρα Κάρια, ἐν ἣ κῶμαι ε'. ἐν αἷς γαθμός, πόλις δὲ ὀνδεμία.

"Thence Media, 22 schœni broad; their commencement is the district Carina, in which there are five villages with stations, but there is no city."

In the preceding notice of Chalonitis, Isidorus has remarked that Mount Zagros is reached five schœni beyond its limits. His expression is in this instance perhaps obscure, and the specified distance might be considered as estimated from Chala, but I judge otherwise, and presume that after "it" of the translation, Chalonitis should or might have been parenthetically inserted. Taking this liberty, Mount Zagros will be according to Isidorus, eleven schœni or twenty-seven and a half miles from Chala, a distance which well agrees with the modern route. From Khasr-i-Shirin to Púl Zeháb is therein stated to be twenty-two miles, and between an hour or two hours ride beyond it, from a spot where a fine rivulet skirts the road, the ascent of Mount

Zagros commences. The transit over this celebrated chain is still difficult from the steepness and length of the ascent, and the road is rugged, notwithstanding much labour has evidently been directed at various epochs to soften its natural asperity. Mid-way is an ornamented and arched structure on which is graven an Arabic inscription, purporting, it is said, that the locality defines the frontier line of Persia and Turkey. At the summit of the pass is a small hamlet with two karavanserais, a few miles beyond which the traveller arrives at Korand, the representative, it may be assumed, of Carina, an appellation which it has nearly preserved. The remark of Isidorus, that the district contained five villages but no city, is still pertinent. It is noticeable, that Isidorus denominates the province Media and the district Carina, possibly it may be thought from the insignificance of the latter. The breadth assigned to it, upon consulting the modern route, extends it to the vicinity of Harúnabad, twenty miles beyond Kerand, and it is probable that a low rocky ridge, occurring about seven miles before arrival at that place, may have determined in former times the limits of Media and of the contiguous province.

CAMBADENE.

Ἐντεῦθεν Καμβαδηνή, ἣτις κατέχει σχοίνους λα΄. Ἐν ἡ κῶμαι ἑ΄, ἐν ταῖς σταθμοῖς, πόλις δὲ Βάπτανα ἐπ’ ὄρους κειμένη. Ἐνθα Σεμράμιδος ἀγαλμα καὶ στήλη.

“Thence Cambadene, 31 schœni broad. In it there are five villages furnished with stations, and a city, Baptaua, upon a hill, where there is a statue and pillar of Semiramis.”

In this province objects of high antiquarian interest are alluded to. If, as it is hoped, the principal points and stations in the Itinerary have been hitherto correctly designated and fixed, viz., Artemita and the river Silla, Chala, Mount Zagros and Carina, we may with some confidence accompany Isidorus through Cambadene, although we may regret the absence of more decisive indications in so interesting a portion of the route. Its prominent features are the city Baptaua, with the statue and pillar of Semiramis. At the present day, within the province there is also a city, Kermansháh, which no doubt is the successor in provincial dignity, of Baptaua, although it may not stand upon the exact site of the more ancient city. That may possibly be looked for nearer Bisitún, twenty-one miles beyond Kermansháh, where are to be found some extraordinary remains of antiquity, which challenge

special attention. The Reverend Archdeacon Williams considers the city of Baptaua with its monuments, to be identical with the remarkable sculptures attributed to Semiramis, and more particularly described by Diodorus. In this view of them I unhesitatingly concur, although, of necessity, I dissent from the reverend and learned gentleman's notion, which in conformity to his peculiar theory, would have them sought for in the vicinity of Ispahán. The view, moreover, is not altogether a novel one, yet as it has always been doubtfully advanced, and rather suggested than asserted, it may be profitable to demonstrate how decisively it is supported by existing memorials at Bisitún, and that they amply corroborate the testimony both of the Sicilian historian and geographer of Charax.

The subject acquires a more exciting interest from its connection with the memory of a female sovereign, whose achievements were of so high an order, that they have been rejected by many as incredible, while some have treated her as a fabulous creation, although the monuments of her existence and grandeur are not yet wholly obliterated.

The nature of the memorials of Semiramis to be expected at Baptaua, will be best explained by Diodorus, upon the original authority of Ctesias. He relates that in her progress from Susa into Media, "the Assyrian queen encamped near a mountain, named Bagistanon in Media, where she formed a garden twelve stadia in compass, in a plain champaign country watered by a spring. Mount Bagistanon was dedicated to Jupiter, and towards the garden had steep rocks, seventeen stadia in height. She cut out a piece at the lower part of the rock, and caused her own image to be carved on it, with one hundred lanceteers of her guard grouped round her. She farther caused an inscription to be graven on the rock in Syriac characters, recording that Semiramis, by laying the packs and fardels of the mules that followed the train of her army the one upon the other, ascended from the plain to the summit of the mountain."

It may now be asked if there are any vestiges at Bisitún of these remarkable sculptures, and it is gratifying to be able to reply in the affirmative. The late Sir John Macdonald after visiting Bisitún, observed that the account of Diodorus "will be found to answer the description of Bisitún in many particulars. It is situated in the road to Ecbatana; one side of the mountain fronts a plain champaign country, watered by a small river, which winds round the foot of the hill, and the lower part of the rock is excavated in the manner described. The group of figures cannot, indeed, be construed into a representation of the Assyrian queen and her guards, but it must at

the same time be remembered that other sculptures have apparently been obliterated to make room for the Arabic inscription." Persian Memoir, pp. 136-137. Sir John Macdonald was more exact as a geographer than an antiquary, and this quotation is only valuable as noting the local coincidences between Bisitún and Bagistanon, for the antiquities are strangely confused with each other. The group of figures and the Arabic inscription of which he speaks do not occur on the principal scarped rock of Bisitún which he has just before described, but on a minor rock at some distance from it; and instead of sculptures having been obliterated to make room for the Arabic inscription, it is part of a Greek inscription which has been destroyed, and which was over the group of figures mentioned. It is, however, true that the mass of the mountain has been scarped precisely in the manner indicated by Diodorus, which is very well exhibited in the sketch presented by Sir R. K. Porter, but what is of more importance, in the upper portion of its smooth surface are yet remaining the heads of three colossal female figures, the faces being in profile and of singular beauty. Above them are likewise traces of characters, which can hardly be considered otherwise than as remnants of the historian's Syriac inscription. The heads are carved in basso-relievo, and are of the most exquisite workmanship, attesting the early perfection of the arts of sculpture. This very circumstance nevertheless rendered their obliteration a comparatively easy task, and possibly suggested it, and the entire front of rock exhibits the marks of the chisels and implements employed in the fatal labour of destruction. As it would appear that the illustrious group was unmutilated in the age of Isidorus, it is after that period that the ruthless mandate was issued, which has deprived posterity of the opportunity of admiring so gorgeous a monument of the celebrated and warlike queen, and so eminent and refined a trophy of ancient art. The faces, which happily remain, might escape, as indeed they have done, the attention of observers, but they are readily as well as most favourably seen by looking obliquely upon the rock, and from the north, as from that point of view they have their profiles turned towards the spectator. It must be understood, that they are so evident and have their outlines so distinct, that when once seen, surprise will be excited that any one had failed to observe them.

Of equal value with these facial reliques are the traces of the Syriac inscription—to some they may be considered of more value. Like the former, they are of extraordinary proportions, and the few of them preserved seemed to me to have the forms of squares and circles, so that when I discovered them, I judged that they were symbols

rather than characters of any alphabet; but now aware of what we might expect to meet with, I can but incline to consider them in the latter light. If so, the Syriac, or reputed Syriac, inscription of Semiramis was not recorded in cuneiform characters, as from a posthumous memoir of the learned E. Jaquet, was the hypothesis of that eminent scholar, and may be of others. The very high interest which attends the knowledge of the alphabet of this venerable inscription has ever made me regret that I did not copy the few characters visible, as they might have sufficed to attest the class to which they belong, and have proved a palæographical acquisition of no mean utility. I may confess that I was not, when I beheld them, quite alive to their value, even had I enjoyed a greater command over time and opportunity than I then possessed.

I esteem it fortunate, while illustrating the Itinerary of Isidorus, to have occasion to offer testimony to the accuracy of Diodorus, and to acquit him of the charge of fiction as respects the Semiramidan sculptures; the only feature of exaggeration in his statement appears to relate to the height of the mountain, which is certainly less than seventeen stadia.

It need not be remarked how worthy this locality is of the most severe and minute investigation, for it is very possible that many additional discoveries might recompense research. Not only should the scarped rock and its neighbourhood be curiously searched, but pains should not be spared to gain the summit of the mountain, to which it will be remembered, if there is truth in the recorded purport of the inscription, Semiramis ascended, and where, if she consecrated the mountain to Jupiter, it is just probable that some architectural vestiges may exist as tokens of that event.

The appellation Bisitún, popularly applied to the scarped mass of mountain, proves to be very nearly the same which distinguished the locality in the age of Darius Hystaspes, as we find in the notice of Major Rawlinson's interpretation of a cuneiform inscription in the immediate vicinity, in which it is called Behistun. This may be the original of Bagistanon, but I cannot hesitate to recognize in the term Behistun that of Behisht tan, or the Place of Paradise or Delight; nor can I fail to consider its currency in the remote age of Darius Hystaspes, but as strong evidence that it was the very name conferred upon the spot by the Assyrian queen.

The adjacent rocks present antiquarian evidences of two distinct periods, subsequent to the era of the Assyrian queen. The more ancient of these are found at the northern extremity of Bagistanon in a nook or retiring angle of the hill. They are placed high up on the

rock, and it is somewhat hazardous to climb up to them; yet they are not inaccessible, as some travellers pretend, without ropes or scaffolding, for, in company with the guardian of the contiguous karavanserai, I contrived to reach them, and found the rock cut away horizontally, so as to afford a space to stand upon. On a smoothed perpendicular tablet is a group of thirteen figures, one of which to the extreme left conspicuously represents the king. Above it are a number of compartments containing inscriptions in cuneiform characters, apparently most distinctly preserved. The sculptures, like those of Semiramia, are in basso-relievo, and precisely in the same proportions and Egyptico-Persic style which characterize the monuments of the Achæmenidian era, to which of course they also belong. They had been assumed particularly to refer to Darius Hystaspes, and have been proved to be so by Major Rawlinson.

Beyond them, again to the north, and at the point where the hill projects upon the high road, is a group of figures, that mentioned by Sir John Macdonald, also fashioned in the rock, but altogether of a different style, being formed in very bold relief, which may have favoured their escape from entire destruction, yet they have been sadly mutilated. Sufficient, however, remains to show that amongst the figures of the group, which may have comprised five or six, is one to whom a winged Victory presents a wreath, while the person so particularized is represented as trampling upon a fallen and prostrate figure, to be presumed a vanquished enemy. The objects of this group are barely of colossal proportions, and it is nearly certain that the monument is the work of Greek artists, and in confirmation of the inference drawn from style, we find over it a Greek inscription, which however defaced, reveals very distinctly the name of Gotarzes, one celebrated in Parthian history. This yields a clue to the character and meaning of the statuary group, and to the events which it was designed to commemorate. Gotarzes, by the murder of his king and brother Bardanes, had seated himself upon the throne of Parthia. While a bold man, the usurper was a violent one, and some of the nobles, disgusted by his acts of tyranny, applied to Rome for a king, and besought Claudius, then emperor, to dismiss Meherdates, a son of Vonones, and resident at the imperial city. The emperor was pleased to approve the request, and commissioned Caius Cassius, governor of Syria, to conduct his nominee to the banks of the Euphrates. Cassius accomplished so much, and retired, leaving Meherdates with his Parthian friends and allies. A variety of ill-concerted measures followed, and eventually the nominee of Claudius, misled by incapable and treacherous advisers, passed the river, and marched to expel Gotarzes.

According to Tacitus, he marched towards Armenia, while Gotarzes took up a position on the heights of Mount Sambalos. There is every reason to believe that the Mount Sambalos of Tacitus is the range of hill in which we find the Bagistanon of Diodorus, by which I do not intend it should be inferred that Gotarzes took up his position at Bisitún, although, from certain advantages it possesses as a defensive point, it was the very one selected by Nadir, in after ages, to secure the remnants of his host after a defeat from the Ottomans, and to preserve the Persian provinces from being overrun by them. It will suffice for our purpose, that the position of Gotarzes was at Bisitún, or immediately in the vicinity, to which fact the sculptures and inscription seem to testify, and as it is farther noticed that the Parthian king's position was covered by the river Corma, this stream will have been either the rivulet of Bisitún, or the larger river of Kermansháh, called now the Karasú. In course of time a battle took place, and victory favoured the bold Gotarzes. The vanquished Meherdates, trusting to the advice of one of his father's freedmen, was betrayed, and delivered in bonds to the conqueror. Gotarzes, as Tacitus writes, "behaved with the pride and insolence of victory. He reviled his captive as a stranger to the blood of the Arsacides, a man of foreign extraction, and a slave to Rome. He ordered his ears to be cut off, and left him in that condition, a wretched proof of Parthian clemency, and a living disgrace to the Romans." It will be seen by the monument at Bisitún, that he was farther desirous to perpetuate the glory of his triumph, and esteemed it worthy of the knowledge and applause of posterity.

From the name of the province as known to Isidorus, viz., Cambadene, it may be assumed that Sambalos was the general name of the mountain range which extends south from Bisitún to Kermansháh, and to the north is connected with the loftier range, which, preserving the same direction, forms the western boundary of Ardelan, while Bagistanon was a term applicable only to that particular part of it made memorable by the Semiramidan and Achæmenidian sculptures. This notion is confirmed by the signification of Baghistan, or rather Behistan, an appellation probably due to the traditions relative to the Assyrian queen's labours. Tacitus states that Mount Sambalos was dedicated to Hercules, a misnomer perhaps for Jupiter, as may be surmised from the more accurate testimony of Diodorus, a Median or Parthian Hercules, I conceive, being inadmissible. It is remarked in a note by the English translator of Tacitus, that Mount Sambalos is nowhere else mentioned; it did not therefore occur to him that it was the Mons Cambalidus of Pliny, "super Chosicos ad septentrionem Me-

sobatene sub monte Cambalido," lib. 6, cap. 27,—a notice which seems to prove that the province was also called Mesobatene, in which name, moreover, we detect that of the Baptana or Batana of Isidorus. Diodorus, moreover, in describing the march of Alexander from Susa to Ecbatana, notices that from Celonæ, he moved into Sambea, a region abounding in the necessities of life, which could be no other than the region of Mons Cambalidus, or the province Cambadene of Isidorus (that of Kermansháh).

At Bisitún we have consequently the gratification to behold the monumental evidences of three distinct periods of antiquity. The example of the Assyrian queen was imitated by the Persian, and after him by the Parthian. In interest to us the Persic tablets, being capable of interpretation, may be considered to exceed the other remains; but if sufficient traces have been spared of the Syriac inscription of Semiramis to enable the identification of its alphabet, not to speak of its language, it would be questionable whether it may not surpass in value the monuments around it, as much as it excels them in venerable age.

The Arabic inscription before mentioned, merely records a grant of land in endowment of the adjacent *karavanserai*, which at present stands the only inhabited structure in a spot heretofore so much favoured by sovereigns, and consecrated by so many and surprising memorials of their grandeur, magnificence, and renown.

We may regret that Isidorus has given no indication by which the site of Baptana might be determined, for I judge it dubious whether it was precisely that of Bisitún, although mentioned conjointly with the statue and pillar of Semiramis. In the distance between it and Kermansháh, are numerous tokens of former population, and at one spot the plain contiguous to the high road is strewn over with fallen pillars and blocks of hewn stone, sanctioning the probability of the notion that a considerable structure, or structures, once stood upon the site. The actual city of Kermansháh has pretensions to some antiquity, not so much from any evidences afforded by itself, as from the numerous and interesting monuments in its immediate neighbourhood, to which, as before noted, Mount Bagistanon or Sambalos extended. The extremity of the range opposite to Kermansháh is in the same manner distinguished by sculptural monuments, although in all instances which came under my observation, of more recent date than Bisitún, and subsequent also to the epoch of Isidorus. The site of Kermansháh is very eligible, and it has the benefit of a fine stream, the Karasú, flowing through the plain between it and the mountain.

At a part of the latter, known by the name of Tak-í-Bostan, or the Arch of the Flower Garden, are some elaborate and remarkable

sculptures. I think it likely that the name is not so frivolous as has been imagined, and that it may correctly designate the embellishments of a royal garden once existing. The first of these, commencing with that on the left, is a magnificent and highly-ornamented *ták*, or arch, very deeply fashioned in the rock, and containing various sculptures in alto and basso relievo. In the upper portion of the recess is a colossal group of three figures, one female and two males, with their hands united, the female being to the right. This group is evidently in a style of sculpture comparatively modern. The figures are popularly ascribed to the age of Khosru Parviz, and are therefore thought to represent that prince and his consort Shirin with her Indian admirer, a notion which need not be entertained, although the inferior style of the sculptures places them undoubtedly at a low period of the Sassanian sway. Below this group is a colossal representation of a warrior king or hero on horseback. His right hand poises a ponderous lance, to which a standard is attached, and his left supports an oval shield. The head is covered with a casque, or helmet, which again is surmounted with an orb, so common a symbol on the coins of the Sassanian princes. Both the horse and rider have trappings of leopard-skin. This mounted figure is supposed to represent Rustam, the Persian hero of romance; but it may reasonably, I think, be doubted that the warlike leader of Segestan, conceding his reality, had ever claim to be sculptured on the rocks of Media or of Iran. But for the superior skill manifested in this sculpture, as contrasted with the upper group, I should have suggested that the human figure was that of the principal king therein shown, displaying him as armed and equipped for the field, in contradistinction to the peaceful attitude in which he there appears, and I should have adduced the orb, a royal badge, in corroboration of the hypothesis. Still the difference in style and execution is too great not to give rise to a conjecture that they are works of various epochs, and I cannot forbear the surmise that the mounted king was the original sculpture here, and that the enlargement of the arch, its ornamental borderings and appendages, with the upper group, are due to a prince of a much later epoch. Unfortunately, there are no inscriptions within this arch to enable the attribution of

• the monuments. On either side of the arch, in the interior, are representations of hunting scenes, one exhibiting a prince and his party as hog-hunters, the other showing them engaged in the chase of stags. These sculptures, in basso relievo, were purely ornamental, and are executed in a very sorry style, and not dissimilar in design to the rude Hindu paintings often seen on the walls of temples and tanks in India. It may be questioned whether they are so ancient as the upper

group, and to class them with the lower one would be absurd, in my estimation.

The next sculptured monument occurs in an arched recess, cut only so deep as to protect the group within it, and represents two erect male figures facing to the front, with their hands resting on their swords. Their casques or helmets are surmounted with orbs. On the side of each figure is an inscription in Pehleví. These valuable records were translated by the late Baron de Sacy, and, according to him, the figures are those of Sapor II. and his son Bahram; but from more correct copies of the inscriptions than those upon which the learned Frenchman exercised his skill and ingenuity, I have discovered that the one referred to Bahram is in truth due to Sapor III., like the former a son of Sapor II., and it may be presumed the elder one. The Baron de Sacy's error of attribution arose solely from the defective state of his copy, as may be seen by reference to his memoir. In the third line of the B inscription of Kermansháh he has only one word, 𐭮𐭥𐭥𐭥, which he renders Vaharan, whereas the inscription, in fact, has two words, 𐭮𐭥𐭥𐭥𐭥𐭥𐭥𐭥 𐭮𐭥𐭥𐭥, or, as I think, Shakhia Shakhapukhri. The Baron de Sacy makes the first word, which also occurs in his inscription A of Sapor the father, "Vohia." I read it Shakhia, because I find in numerous instances, I may say constantly in other places, that 𐭥𐭥 is used to denote Sh; and if I am correct, I consider Shakhia quasi Sakhi, to mean the magnificent or liberal. It is somewhat remarkable that the learned investigator did not observe that the word he rendered Vohia in the one inscription, was the same which he construed into Vaharan in the other, and that he had not therefore suspected a deficiency.

The third sculptural monument at this interesting locality consists of a group of four figures, three of which are erect, the fourth being prostrate. To the right hand, or place of honour, stands a personage holding a sword, while his head is surrounded with rays, as of the sun. The two figures in line with him are clad in regal garb and habiliments, and grasp with their right hands the same circular ring or wreath, implying, I presume, their relation or affinity. They stand upon the fourth or prostrate figure, which may reasonably be concluded that of a vanquished enemy. The general purport of this sculpture is therefore self-explained, so far that it was intended to commemorate a triumph over some adversary by the two royal persons (most probably father and son) in question; and the figure with rayed head is obviously a representation of Mithra or Ormuzd, under whose favour the triumph was achieved. To the left of the middle figure, manifestly that of the king-father, is an inscription, which unhappily, from

being somewhat imperfect, or so considered to be, has never been copied, an omission which it may be hoped some future traveller will supply, for one word luckily preserved would possibly enable us to appropriate the group, to which I shall proceed to show that importance attaches, at least to those who make the middle ages of Persia and the topics connected with them their study. I allude particularly to the appearance of Mithra or Ormuzd in sculpture, for I am not aware that the figure is found in any other sculptural group of the Sassanian dynasty, neither that it ever occurs on any monument of the dynasties preceding it, where indeed I think that we have no reason to expect it. It occasions no surprise to find it on a monument of the Sassanian era. yet the fact is material, as bearing upon the nature and character of the religion said to have been revived under Artaxerxes, which, it may be submitted, must have been very different to that dominant in Persia under the Achæmenides, and to this assertion the sculpture at Kermanshâh bears evidence, and will do so until a figure of the same sacred personage shall be discovered among the Achæmenidian memorials at Persepolis or elsewhere.

There are yet other sculptures at some distance from Tak-î-Bostan, which I have now to regret, however vainly, that I did not visit, neither do I remember that they have been described. They are worthy of attention, as is every record of the Sassanian rule in Persia, particularly if accompanied by inscriptions, which it seems were usually attached to monuments, explanatory of their objects, and which in our days are facile of interpretation. It is even possible that Persia may contain monuments of all her Sassanian princes, to collect which would be no unworthy labour. We have seen that the mountain range extending from Kermanshâh to Bisitûn, and thence northward, has been selected in all ages by the sovereigns of the day, to become the depository of their glory and prowess, and so contagious has been the example first set by the Assyrian queen, that, undiminished by the current of time, it induced the late Prince Viceroy of Kermanshâh, Mahomed Ali Mirza, in emulation of the illustrious dead, to cause his own figure to be sculptured on the left side of the arch at Tak-î-Bostan. The style of the viceroy's group is at least so natural as to excite wonder that it was so well done, although the effect is ludicrous from the contrast which it challenges. Besides the difference in costume and position, we are presented with the Kaliân or pipe, in place of the manly weapons of more ancient heroes, and care has been taken with gaudy colouring to improve the sombre and native hue of the rock. The prince is moreover represented as sitting on his carpet, as to stand like the Sapers of old would have been held indecorous, and he

is attended by his minister and a favourite servant, who are of course standing in all humility in the august presence.

It will be remembered that the foundation of the present city of Kermansháh is ascribed by Oriental writers to Bahram, the son of Sapor II. of the deciphered inscriptions, and that its name was conferred in consequence of a victory gained by that prince in Carmania. The inscriptions and sculptures do not entirely confirm this ascription, as they go far to establish that the site was one particularly favoured by Bahram's father, yet they do not militate against the supposition that Bahram may have selected it as his chief residence, and therefore have greatly embellished it, and it is very probable that some of the unascribed sculptures may refer to him. And here I may point out how usefully the Sassanian sculptures may be applied to verify the favourite residences and capitals of the kings. At Naksh-i Rostam and Persepolis, we discover the memorials of the first monarch Artaxerxes, and of his son Sapor I.; at Shahpúr, near Kazerún, are alike monuments of the latter prince; and here at Kermansháh are those of Sapor II. and Sapor III., and probably of Bahram IV., and of Khosru Parviz, embracing a period of above four centuries, and, as before observed, it may be hoped that in these and other localities monuments of the whole series of the Sassanian princes exist, and that they may eventually be brought to light. It must not be overlooked, in considering the origin of Kermansháh, that there is ample proof that in remote antiquity there was a large city in its neighbourhood, and that the present city, whether owing its name to Bahram or otherwise, can only be regarded as the natural successor to a more ancient one of equal provincial dignity. I have sometimes fancied that the name Kermansháh signifies the king's granary, Kerman having the import of granary or store of grain, as it was customary to bestow similar appellations upon towns and provinces, and I should be much inclined to accept this explanation of the name, if the *a* in Kerman be short and inherent, which it is, at least, in ordinary pronunciation; neither would it be contrary to the character of the province for fertility and consequent abundance of produce.

With these remarks on the antiquities of Bisitún and of Kermansháh, we shall follow Isidorus in his route to Apobatana, adding that Bagistanon occurs as a point in the marches of Alexander, and if credit may be given to the speeches ascribed to that conqueror by his historians, he was perfectly cognizant of the achievements of Semiramis, and it may be inferred, of her sculptural evidences at Behistun. Moreover, like the Assyrian queen, he was delighted with the position and fertility of the region around it, and tarried, as she did, in its

cultivated and luxuriant plains, to refresh his army in his progress to Ecbatana.

UPPER MEDIA.

Ἐντεῦθεν ἡ Μηδία ἡ ἄνω σχοῖνοι λη'. καὶ ἄρχεται εὐθὺς πόλις Κογκοβάρ.
 "Ενθα Ἀρτέμιδος ἱερὸν, σχοῖνοι γ'. Εἶτα Μαζινιάμαν', ὃ ἐστὶ τελώνιον, σχοῖνοι γ'.
 Εἶτα εἰς Ἀδραγιάναντα' βασιλεία τῶν ἐν Βατάνοις, ἡ Τιγράνης' ὃ Ἀρμένιος
 καθέλει, σχοῖνοι δ'. Εἶτα Ἀποβάτανα, μητρόπολις Μηδίας, καὶ θησαυροφυλά-
 κιον, καὶ ἱερὸν ὅπερ Ἀναΐτιδος δεῖ θύουσιν, σχοῖνοι ιβ'. Εἶτα ἐξῆς τρεῖς κῶμαι,
 ἐν αἷς σταθμός.

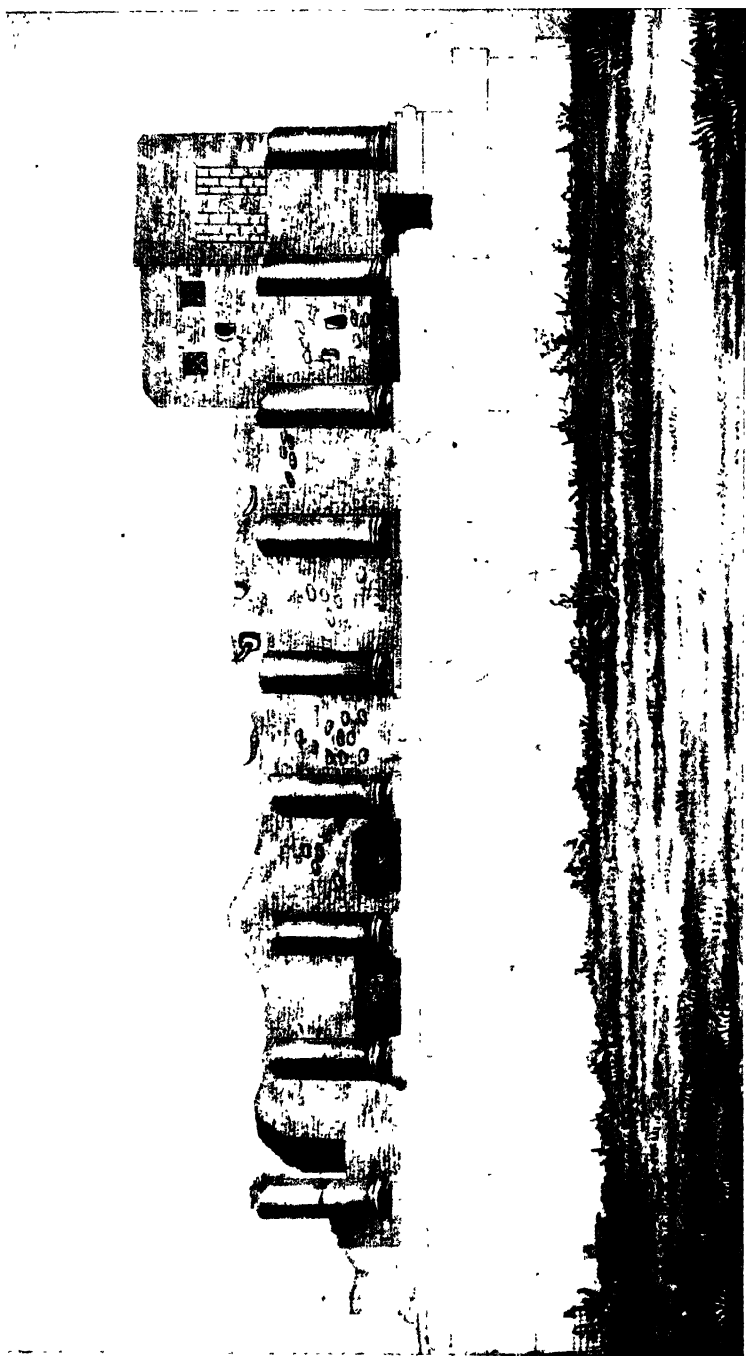
"Thence Upper Media, 38 schoeni. Three schoeni from its commencement is the city of Conco-bar, where there is a temple of Artemis. Three schoeni farther on, Maziniaman, a custom-house, and four schoeni from it, Adragiananta, a palace of those at Batana (or among the Batani), destroyed by Tigranes, the Armenian. Twelve schoeni farther, Apobatana, the metropolis of Media, the treasury, and the temple, where they perpetually sacrifice to Anaïtis. Further on still there are three villages furnished with stations."

At the distance of three schoeni from the commencement of Upper Media, we are told by Isidorus that the city of Conco-bar was situated. By this intimation we are enabled accurately to fix the boundary of this province as well as of its predecessor. By reference to the modern route it will be found that from Bisitún to Kangavár is a distance of thirty-two miles. It will not be questioned, I presume, that the latter town, retaining at this day the very name of the ancient city, is its genuine representative, and the commencement of Upper Media was therefore seven miles and a half from it, or at some spot between it and Sánah, a village intermediate between it and Bisitún. It is worthy of notice that the boundary of antiquity is the same as that of modern times, and at a particular locality between Sánah and Kangavár is the line where the jurisdictions of Kermansháh and Hamadan respectively meet, which on that account is the favourite rendezvous of the freebooters of Kangavár and the surrounding country, and so daring are they that no karavan ever passes it without apprehension. It may here be noticed that the sum of the distances between Seleucia and Kangavár, according to Isidorus, consists of one hundred and ten schoeni or two hundred and seventy-five miles; by Mr. Webb's route the distance between Baghdad and Kangavár is stated to be two

¹ V.R. Βασιγράβαν, Βαζινιάβαν.

² V.R. Ἀδραπάναντα.

³ V.R. Ἀγιγράνης.



hundred and seventy-eight miles and a half. We have noted that there necessarily existed a trifling difference in the very commencement of the two routes, owing to the starting points being distinct, still that the same distance on both brought us to Chala; assuming Khaer-i-Shirin to be the site of that ancient city, it may therefore in like manner be pointed out, that from Chala to Kangavar by the old itinerary, is a distance of one hundred and fifty-five miles, and by the modern one, one hundred and fifty-eight miles and a half. The discrepancy of three miles and a half is too slight to be regarded with any feelings but those of gratulation, and while the general coincidence of the itineraries is favourable to the accuracy of either of them, we feel the assurance that the several positions of interest on the high Median road have been accurately determined, and that the measure assigned to the schœnus of Isidorus is the correct one. The importance of demonstrating that there is not the possibility of mistake in the recognition of Concohar, a capital point of the Itinerary, is so great, that it is with pleasure we can direct attention to the undeniable evidence offered by the remains of the temple of Artemis. These imposing ruins still soar above the humble dwellings of the modern town, testimonies to the ancient splendour of the sacred locality and to the fidelity of Isidorus.

I have the satisfaction to submit a sketch of these venerable vestiges, taken at some little peril, owing to the suspicious nature and inhospitable manners of the people, who collected to the number of several hundreds and with no friendly intent, yet I contrived to effect what I desired before their ill will had exceeded the limits of angry expressions.

It would be remarkable that Concohar, which, from its present indications, must have occupied a distinguished rank amongst the cities of Media, should have been unknown to the ancient classical geographers, and mentioned only in this fragment of Isidorus;—yet I believe no attempt has been made to ascertain under what appellation it has been noticed by them, if noticed at all. Diodorus informs us that Semiramis proceeded from Bagistanon to Chaone, which he designates as a city of Media, where she built a stately pleasure-house upon the summit of a high rock, which attracted her notice from the rising ground on which she had encamped. If it might be argued that Chaone was a locality on the direct route from Bagistanon to Ecbatana, I should not have hesitated in ascribing it either to Sannah or to Kangavár, and to have suggested that any future traveller might have verified which of the two places had the better claim, for although it would be monstrous to expect to discover any traces of the pleasure

house of Semiramis, local and physical circumstances might concur in pointing out its site, nor is it improbable that the wrecks of buildings might be found upon a spot, which, in all likelihood, was for a long space of time a remarkable and distinguished one. The learned Jacquet, however, thought very differently upon this point, and in a valuable note appended to his unfortunately unfinished *Examen Critique* of Professor Lassen's Work on the Inscriptions of Persepolis, &c., offers his reasons for the belief that Chaone is the modern Van, which according to Armenian writers was a favourite residence of Semiramis, and which, as M. Jacquet states, still bears the name of Schamirama-kert, or the city of Semiramis. A much greater extent is thus attributed to the progress of Semiramis, than appears to me sanctioned by the text of Diodorus. It is indeed asserted that she made a very long stay at Chaone, and she must have been delayed some time just before at Bagistanon. This circumstance may favour the notion that a considerable interval occurred between the two places, but does not render it certain, especially when Diodorus gives the reasons of the lengthened stay, and those discreditable ones. The Armenian authors represent her as visiting Van immediately after the conquest of Armenia, whereas Diodorus asserts her journey to have commenced from Babylon, so there would appear to be no evidence, allowing Van to have been occasionally visited and even embellished by Semiramis, as the Armenians pretend, that it is the Chaone of Diodorus. M. Jacquet, it may be observed, rests his hypothesis upon the approximation in sound between Chaone and Van. He nevertheless fairly cites the authorities of Polybius, Ptolemy, and Stephen of Byzantium, who have mentioned Chaone, or the province in which it was situated, and all concur in assigning them to Media. Chaone, a city of Media, say Ptolemy and Stephen, and Chaonitis, says Polybius, a province of Media. It must be submitted that the Media of all these and of other classical writers was not Media, a kingdom, but Media, a province, from whose circumscribed limits Van may be clearly proved to have been excluded, it having been comprised within those of Armenia Major, or it may be of Atropatene, although as regards the latter, one lake only is noticed by Strabo as belonging to it, viz., that of Spautā, which is seemingly the lake of Urumia. The description of the Assyrian queen's operations at Van, as given by the reputed Moses of Chorene, so closely agrees with that set forth by Diodorus of her labours at Chaone, as to excite the suspicion that the former may have been derived from the latter, or from the original authority, Ctesias. The Armenian writer says, according to his English translator,—“His rebus feliciter gestis, Semi-

ramis in loca regionis montuosa quæ ad meridiem spectant ascendit, (namque tum æstas erat) ut se in vallibus et campis floridis oblectaret, ubi terræ amœnitatum et tenuitatem cœli contemplan, fontesque irriguos, ex fluviis jucundo murmure labentes, Hic, inquit, urbes et domicilia regia exstrui oportet, ut quartam vertentis anni partem æstiva tempora, jucundissimè in Armeniâ traducamus: et cum varia loca peregrasset, ab orientis partibus ad ripam lacus salsi pervenit, ubi collem quemdam oblongum comperit," &c.—Lib. i. cap. 15. The lamented Jaquet, moreover, recognized Van in the Chaonitis of Strabo, a district or province in conjunction with those of Caspiana and Basoropoda secured by the generals of Antiochus the Great upon his fall, and to this opinion we may assent, so far that its locality presents no objection to the surmise.

Should the Chaone of Diodorus, and of the other classical authorities, refer to a site between Bisitûn and Ecbatana, as before said, I should ascribe it to Sânah or to Kangavâr. At the first place behind the village is a remarkable scarped rock, a circumstance deserving notice, in which two chambers at a considerable height have been excavated. These I should have little doubt were sepulchral repositories, yet the summit of the rock and its vicinity have not been explored.

The possibility that Kangavâr was the ancient Chaone, will, I think, rest upon the chance that the former name is more recent than the latter, which again is a Greek name or has been borne by Greek cities elsewhere, as in the province of Cataonia. That the temple of Artemis was a Greek temple, I presume to be evident from its remains; and I cannot refuse the impression that Kangavâr was one of the Greek cities which the policy of the ancient Persian as well as of the Parthian kings had established on the line between Babylon and Ecbatana. Still the point is doubtful, and will best be settled by the conscientious traveller.

Another indication of the relative positions of Chaone and Ecbatana is given by Diodorus, who represents the mountain Zarcheum as intervening between them, and which, he goes on to say, "being many furlongs in extent, and full of steep, precipitous, and craggy rocks, there was no passing but by long and tedious windings and turnings. To leave, therefore, behind her an eternal monument of her fame, and to make a short cut for her passage, she (Semiramis) caused the rocks to be hewed down and the valleys to be filled up with earth, and so in a short time at a vast expense, laid the way open and plain, which to this day is called Semiramis's way." If either Sânah or Kangavâr represent Chaone, this mountain Zarcheum should be

either the slight range occurring between Kangavár and the plain of Assadabad, or more likely the spur of Mount Orontes crossed between Assadabad and Hamadan, where, on the western side, is a village named Zágar, or Záhghar. Still it may be noticed that there is a locality named Sarcham near the Kafisan Koh, and throughout that range there is abundant proof that the road has been artificially formed, and if the theory of M. Jacquet be correct, the position is consistent, lying on the route from Van to Ecbatana.

If the verification of the site of Ecbatana, "the metropolis of Media," had been our aim in this investigation of the Itinerary, we might have terminated it at Concohar, for it is obvious that the measure of nineteen schœni, or forty-seven and a half miles, remaining, according to Isidorus, between it and the latter city, so incontestably identified, can only be applicable to Hamadan amongst the capital cities of Persia. Referring to Mr. Webb's admeasurement, the present distance is forty-five miles, the difference being no more than is reconcilable with the change in the positive sites of the ancient and modern cities, and the distinct points from which the intervals were estimated, if other causes, before alluded to, did not suffice to explain it. It needs not be remarked that both Tabriz and Ispahan are hundreds of miles distant from Kangavár.

We shall however proceed in the comparative examination of the route, because in this brief portion of it only do names occur, to which those of present localities, so far as known, offer no affinity, and we have no warrant by other means to assign them. The number of marches or stations naturally coincide in both routes, being three in either of them. From Concohar we are conducted by Isidorus to Maziniaman—a custom-house, as he defines it to be—three schœni distant, that is seven miles and a-half. From this, at four schœni or ten miles, was Adragiananta, where was a palace. The united distances, or seventeen miles and a-half, would bring the traveller into the valley of Assadabad, near the present villages of Minderabad and Kárkhána; but I dare not speculate upon the representative of Adragiananta, from having merely traversed the valley in question, yet I may suggest that the term Kárkhána implies an establishment of some kind, and is not unfrequently used to designate ancient remains, which from the labour evidently exercised in their construction, excite astonishment, and the exclamation, "Chí Kárkhána," would mean no more than, "What labour has been expended here!" The valley itself is of considerable circumference, and, as seen from its approaches, whether on the side of Hamadan or of Kangavár, presents one of those *coups-d'œil* which are not easily effaced from memory. It is studded

with villages mostly perched on those extraordinary because vast artificial eminences, numerous, it is true, in many parts of Persia and in other countries, but unusually so here, and which we learn from Strabo, were in his age ascribed to Semiramis. As they were then objects of traditionary attribution, their antiquity is very remote, and although, from their very number, they may be erroneously ascribed to that celebrated queen, it is possible that they may be indications of a primeval population and epoch. To the west, the valley is overlooked by a lofty range of mountains, interposing between it and the plains of Ardelan, at the season of the year (winter) in which I saw them topped with snow,—while the celebrated Orontes was entirely bare, and the latter, it may be observed, is rather a single hill than a range of hills. I suspect the superior range west of the valley was the ancient boundary of Media, Ardelan then, as now, being held by the highly celebrated race of Gordueni, Karduchi or Kurds. While calling the valley Assadabad from the village at which its chief resides, I must point out that it has probably some special name which I regret I did not learn, or that, having learned, I cease to remember. Between it and Kangavár, however, is now a ráhdári station or custom-house, therefore corresponding in such respect with the Maziniaman of Isidorus; and this fact seems to indicate that the state of the country has undergone little change since his time, when we also observe that the limit between Upper Media and Cambadene was the very same as that at the present day between Hamadan and Kerimansháh. The term Maziniaman may possibly be a compound one, and the latter portion, *aman*, would, in the modern dialect of Persia, signify “secure.” It had in more ancient dialects perhaps a similar signification. The name of the custom-house may therefore have been Mazini, or perhaps Mesene, an appellation recognized in Pliny, who has a Mesene and Mesobatene in this neighbourhood: the latter has been before noticed as being dependent upon Mons Cambalidus, the range of Bisitún. The position of Adragiananta is of more importance, as it could boast of a palace, which Isidorus states was that of those at Batana, or, as his phrase is capable of being rendered, “among the Batani.” The name in this instance also would seem compounded of Adrak or Adrakí, and

- nanta or nanda. The first is an appellation still conferred upon towns or localities, and the second might mean “little,” and the whole consequently Little Adrak or Adrakí. However this may be, its site was no doubt near the villages of Minderabád and Karkhána.

The present abode of the chief of the valley is at Assadabád. He is an Afshar by tribe, and a brother of the more rapacious chief of Kangavár. With reference to the many agreeable sites afforded by

the valley, especially at the skirts of the range separating it from Ardelan, it is manifest that of Assadabád has been selected with a view to the convenience of exacting dues from kafilas, which are authorized to be levied by the chief, although with his brother at Kangavár he is held to be dependent upon the Hamadan government. From Assadabád to Hamadan the distance is twenty-three miles;—at eleven miles the village of Zahghar occurs, being the first, in this direction, on the plain of the latter city, and the space intervening between it and Assadabád is occupied by a spur from Mount Elwand, the ancient Orontes. The road did not appear to me difficult, yet it would deserve to be examined with reference to the reputed labours of Semiramis, and as to the possibility of its being the Mount Zarcheum of Diodorus. It might further be advisable to ascertain the features of the other route from Kangavár to Hamadan (for there are two routes), which passes to the eastward of the one I travelled, and which must cross Mount Orontes at some other point.

Before reaching the present city of Hamadan, and near the village of Miriám, numerous pillars of a very pure white marble are observable as strewed upon the surface of a pasture to the left of the road. The site of course merits examination, for such vestiges can but recall to recollection that we have to look for the remains of the celebrated temple of Diana for which Ecbatana was so long renowned, and where, as Isidorus has it, "they perpetually sacrificed to Anaitis." Hamadan is indeed at present only a provincial capital, and the glories of Ecbatana have vanished, yet Mount Orontes still soars above its site, and the memory of its pristine splendour is preserved. Semiramis is asserted by Diodorus to have originated some extraordinary labours for the benefit of Ecbatana, and among them caused a stream of water to be conducted by a tunnel through Mount Orontes. It may be that the historian was guided by traditionary reports, yet some respect is due to them when we know they were reports so old as the reign of Artaxerxes Mnemon, the patron of Ctesias. The actual city is most copiously supplied with water, which flows in divers broad channels through it and its gardens, and it would no doubt be advisable to seek the source from which it is derived in the adjacent mountain. It would probably be discovered that there are traces there of vast labour in time past, which furnished materials for the tradition or fact, as it may be. It is known that at a certain spot on Mount Orontes, there is a cuneiform inscription, a record of one of the Achæmenidian kings, and at a considerable distance, or five or six miles, from the present city. If the source of the many rivulets of Hamadan be found near this inscription, I should attach credit to the tradition respecting Semi-

ramis, and could understand why the locality, being possibly a sacred one, was chosen by a subsequent monarch to engrave his decrees, while otherwise it is difficult to conjecture why a public document should be placed in a situation so remote that few people might be supposed to see it, its very object being that it should be known to all people. The skirts of the hill immediately behind Hamadan are covered with tumuli and the debris of the burial-places of the ancient inhabitants of Ecbatana, and the irregular surface yields to the search of the curious and diligent, vast numbers of coins and other reliques. South of the city are also conspicuous mounds, the principal of which, known to the inhabitants as the Treasury of Darab, or Darius, must suggest to the mind of the observer the desire to identify it as the site of the citadel of Dejioces, so vaunted by classical authors. A complete and satisfactory account of Hamadan is still a desideratum. Many travellers have visited it, and by their description of some of its remains, may claim our obligation, yet we feel that we have more to learn about it and its environs. The metropolis of Media, historically famous, venerable from its antiquity and from the association of its renown with so many illustrious names, cannot be, even in decay, bereft of interest, and it is reasonable to conclude that an industrious and intelligent scrutiny of its vicinity would lead to many valuable discoveries, and elicit many important facts.

It may suffice to mention that at Hamadan, where reside many Jews, the tombs of Esther and Mordecai are pointed out; and it also contains the sepulchre of the distinguished Arab physician Avicenna.

The designation which Isidorus applies to Ecbatana, viz., that of Apobatana, signifies probably the parent city, and is expressive of the belief in its high antiquity; yet as the appellation was a general one, it was also conferred upon other cities. hence we have more than one Ecbatana mentioned in classical history. Should Hamadan have a more particular derivation, it may be noticed that Bochart considers Ecbatana as equivalent to the Arabic Agbatha, variously coloured, with reference to the citadel of Dejioces encircled with ramparts of various colours; nor is it improbable that the city may have had different names, being severally called Apobatana, the chief or parent city, and Agbathana (the Greek Ecbatana), the divers coloured; but then the genuine Median name remains to be learned, from which the present term Hamadan has descended; and although the Agbatha of Bochart is not a dissimilar form, yet Agmatha would better suit, and in cognate dialects with that which we may suppose to have been current in ancient Media, would mean the fire temple, or perhaps even the great temple.

In bringing this memoir to a conclusion, it will afford me gratification if, in tracing the route of Isidorus, I have been able to impart any additional and novel information respecting the important remains of antiquity still extant on the high road from Mesopotamia into Media; nor will that gratification be diminished, should the indications occasionally presented of various subjects of research to which attention is due, be useful to future travellers in a region distinguished as the seat of the earliest civilized communities of mankind, and which is so fertile in monuments and vestiges of its past splendour and renown. While illustrating the trustworthy accuracy of Isidorus, I have had equal satisfaction in the opportunity of lauding the character for fidelity of description, of Diodorus, which, owing to an apparent exaggeration in his narrative, has been sometimes suspected; yet has it been amply vindicated by modern investigation, and it is to his pages that we must have recourse for the most exact and detailed accounts of many of the vast monuments of the ancient world.

It will not fail to be inferred, from the tenor of my observations on the vestiges at Behistun, that I consider Semiramis to have been a real personage. Her monuments there I esteem as proofs of that position, sufficient to remove distrust upon the point, therefore are they exceedingly valuable. Many very eminent men have questioned the fact, and the late lamented Jacquet was more than dubious upon it, yet scepticism must give way before demonstration. I venture not to speculate upon the age in which the Assyrian queen flourished, but I do not despair that some further and happy discovery may enable us eventually to determine it. At Van, which M. Jacquet supposed to be Choane, are numerous cuneiform inscriptions discovered by the unfortunate Schultz. The word Xerxes is read on one of them, which, without reference to their matter, testifies to their age, and to the prince to whom some of them at least are due. Of the various inscriptions recorded as having been graven on rocks and columns, in the Syriac character, by Semiramis, some may yet be brought to light; but, as intimated in the course of this memoir, I do not expect them to be expressed in cuneiform characters.

ART. IV.—*Report on the Progress of the Culture of the China Tea Plant in the Himalayas, from 1835 to 1847.* By J. FORBES ROYLE, M.D., F.R.S.

[Presented June 17; Read November 18, 1848.]

AMONG the several experiments now in progress for the improvement of the Resources of India, there is not one which, in its ultimate effects, will probably be of such great importance, as the cultivation of the genuine Tea-plant of China in the valleys and slopes of the Himalayan Mountains. Having some further recommendations to make, respecting a culture which I believe I was the first to recommend to the Indian Government in the present localities, I think it advisable to give an account of the reasons which led to the suggestion, as well as of the results which have been obtained.

It was in the early part of the year 1827 that I first mentioned to the Earl Amherst, then Governor-General of India, the probability of a successful cultivation of tea in the Himalayan Mountains, and included it specifically in a report which was presented to the Indian Government at the latter end of that year, stating that "It does not appear by any means so delicate, or so limited in geographical distribution, as is generally supposed, and although it appears to attain the greatest perfection in the mild climate about Nankin, yet it flourishes in the northern latitudes of Peking and of Japan." On Lord William Bentinck visiting the Saharunpore Botanic Garden, in 1831, I again mentioned the subject, and included it in the report which was presented to his Lordship, in which I stated my wish "to attempt the cultivation of the tea-plant, of which the geographical distribution is extended, and the natural sites sufficiently varied, to warrant its being easily cultivated." This report was afterwards read before the Asiatic Society of Calcutta, and printed in their Journal early in 1832. In the year 1833, in the introduction to my "*Illustrations of Himalayan Botany*," p. 5, referring to the slopes of these mountains, I stated—"Here there is considerable prospect of success in the cultivation of the tea-plant, for the different elevations allow of every variety of climate being selected," and the "geographical distribution of the plant is extended, and the natural sites sufficiently varied, to warrant its being beneficially cultivated."

Though unacquainted with the fact, I was in the year 1839 informed by Mr. Greene, that Sir Joseph Banks had many years previously recommended the cultivation of tea in the Himalayan Mountains, and that Dr. Govan had also done so at a later period. Dr. Wallich also, in the year 1832, presented a paper to the Committee

of the House of Commons, recommending the cultivation of tea in the districts of Kemaon, Gurhwal, and Sirmore.

Not having had an opportunity of detailing my reasons for the opinions which I had so long entertained, I did so in my "Illustrations of Himalayan Botany," pp. 107 to 127, published in 1834. These reasons were given under the heads of "the varieties or species which afford the different teas of commerce—the extent of their distribution—the climate, soil, and culture which they prefer—as well as the plants with which they are associated, either in a wild or cultivated state" (p. 109). After a detailed examination, I stated that, "It cannot be a difficult task to transfer from one country to another, a plant which grows naturally and is cultivated extensively in one which possesses so many of the plants which are common to the two, and not found elsewhere;" and as the soil also seemed suitable, I hoped to see the slopes of the Himalayas covered, and the edges of their terraced flats—for here more completely than either in Italy or China, "the peaks are shelved and terraced round,"—"surrounded with plantations of the tea plant" (p. 124). I then stated that there could not "be a doubt of success in introducing the cultivation of tea, with the strongest probability of all its properties remaining unchanged, as every requisite is so similar to what it experiences in its native country. It is not an unimportant consideration, that the cheapness of labour exceeds even that in China;" and, "supposing that the finest flavoured teas could not at first be successfully cultivated, an immense consumption would be found among Asiatic nations for even inferior kinds, which would still be superior to what they now use." For carrying out the suggestions, I concluded with stating that, "with a little scientific attention in the choice of a suitable climate and soil for the growth of the plant, and the application of practical experience, (that is, of Chinese who have been accustomed to the process) in the preparation of the leaf, there can be but little doubt with respect to the successful issue of an experiment, which need not be very expensive, if not commenced on too large a scale."

At the time that the above paper was printing in this country, Lord W. Bentinck, with the sanction of the Court of Directors, had determined upon attempting the cultivation of tea in India. A Tea Committee was appointed, who reported that, "the experiment may be made with great probability of success in the lower hills and valleys of the Himalayan range." To this they say they were led by a "very able and interesting letter of Dr. Falconer on the subject." This letter, or report, is remarkable for coincidence in argument and in

opinion with what I was at the same time writing and printing in England; and this without any communication of ideas, for the two essays must have crossed each other at sea.

One of the results of the queries circulated by the Tea Committee was an important communication from Major Jenkins, in which he recommends the district of Assam, with its valleys and mountains,—as camellias are found there, and a coarse kind of tea “undoubtedly is indigenous.” Of this, some specimens had, it was found, been sent by Lieut. Charlton, three years previously to Calcutta; but leaves and seeds had also been sent as early as 1826 by Mr. D. Scott, who insisted upon their being those of a real tea. In consequence of this discovery, a scientific deputation, consisting of Dr. Wallich, with Messrs. Griffith and McClelland was sent to investigate the natural history of Assam. From all of these gentlemen we have received valuable information on different points.

Dr. Wallich conceived that this tea-plant of Assam may have “originally travelled from the frontiers of China;” and concluded that though the forests of Assam might yield a good and potable tea, yet he supposed it would be necessary to ascend much higher to meet with a decided winter of six weeks or two months duration, for the more valued and superior teas, as it is in such localities we must establish our new plantations.

Mr. McClelland considered “the plant of Assam” not as an alien estranged from its own climate, but as an indigenous plant; and states, as the result of his observations, that, “protected in Assam under the shade of dense forests, and a gloomy and excessively humid atmosphere, the tea-plant flourishes in its barren soil along the verge of rivers, lakes, and marshy lands;” and he considers the notion regarding the mountain habits of the Chinese tea-plant to be erroneous.

Mr. Griffith also published a detailed report, in which the tea localities, and the appearance of the tea-plants are described. A comparison is also instituted between the vegetation associated with them in Assam, and that of the tea provinces of China; and he came to the conclusion, that “all the evidence points out the visionary nature of the views of the aptitude of the Himalayas, &c., for the cultivation of the tea-plant.”

To judge of the general import of these representations, we may notice the effect they produced on the minds of those unconnected with the original recommendations, or with the correction of the supposed errors. This we can do in the case of a very competent witness, Dr. Wight, the author of “Illustrations of the Botany of the

Peninsula of India," who says, at p. 91—"Mr. Royle, in a very elaborate article on the subject, comes to the conclusion that the tea-plant is virtually a native of a temperate climate; and that the slopes of these mountains afford the most proper climate and soil for the growth and culture of this plant. His views, however, are so well supported, and the contradictory evidence on which they are made to rest, so ingeniously explained away, that much difficulty must have been experienced in detecting his errors, had not actual and careful examination of the circumstances under which the plant is produced in its native country, enabled the deputation of the Tea Committee, who went to examine them, to point out the very erroneous nature of the opinions advocated by Dr. Abel, which Mr. Royle had adopted and supported, with such a fruitless expenditure of ingenious reasoning."

So Dr. Meyen, late Professor Extraordinary of Botany in the University of Berlin, in his "Outlines of the Geography of Plants," lately translated by the Ray Society, when treating of the "principal cultivated plants on which the prosperity of nations is based," says, with respect to the tea-plant, at p. 387—"Its culture has also been attempted in Bengal, and great success is expected from it; nay, this question has been very recently discussed by Royle, yet, as it seems, with great partiality to India."

In reply, I may briefly state, that I should regret to have had it proved by the event, or by subsequent information, that I had taken too partial a view, because this in the end is as injurious as an unfavourable one, being equally calculated to discourage enterprise and improvement. Dr. Wight makes the mistake of ascribing to the joint report of a Committee, opinions which were entertained by two only of its members, but certainly not by Dr. Wallich, the head of the Commission, as even after inspecting the tea-sites of Assam, he considered higher elevations as desirable for the more valued and superior teas. (Vide Tea Papers, pp. 58 and 67.). With respect to my having adopted Dr. Abel's opinions, I can only state that they are the same which I had formed in 1827, long before I had read Dr. Abel's work; and that they were formed independently, in consequence of finding in the Himalayas many Chinese plants, and among these some allied to the genus *Thea*. The tea-plant is only one of a number of others which I have recommended for cultivation in different parts of India, in consequence of the apparent suitableness of soil and climate, and from inferences deduced from the Geographical distribution of the Flora of the plains and mountains of India. I was happy to find that I coincided in opinion, not only with Dr. Abel, but with others who had drawn

legitimate deductions from what seemed to be well ascertained facts. With respect to the criticism of Mr. McClelland and the late Mr. Griffith, it may be observed, that they have omitted to prove, that the tea-plant of Assam is identical as a species with that of China. For if not identical, their objections to my observations are invalid, as not applicable to the same plant, but if identical, their finding it in the moist climate of Assam is a sufficient proof that it is one capable of flourishing in a considerable variety of climate, if it exists also in the more open tea districts of China. That the identity was not settled before proceeding to argue on the unsuitableness of the Himalayan climate for the tea-plant of China, we have the proof in Mr. Griffith's Report on the Honorable Company's Botanic Gardens, Calcutta, p. 102.

"In a practical point of view, an authentic herbarium is equally necessary. Thus supposing the A-sam tea-plant (and this appears by no means destitute of foundation) should turn out to be a different species from the Chinese plant, or from either the Chinese green or Chinese black teas, supposing them to be specifically distinct, there will be no reason for doubting that this curious and radical error will have arisen from the want of authenticated specimens of the Chinese plant or plants." If the Assam plant, therefore, be a species distinct from that of China, there is no reason why it should not require a different climate; but if it be only a variety, the result of culture or of neglect in an old place of culture, then also we may have, as in other cultivated plants, some varieties more capable than others of bearing greater extremes of temperature, of dryness, and of moisture.

One of the great difficulties in drawing correct conclusions in this question, is one which in a great measure still continues, and that is, the difficulty of determining what is a species, and what a cultivated variety of the genus *Thea*. Dr. Abel, Sir W. Hooker, Mr. G. Loddiges have given it as their opinion that what is called the green tea-plant (*Thea viridis*) is a distinct species from that called *Thea Bohea*. The latter is well known to be a plant common near Canton, though it was uncertain how far it extended north; but the former flourishes in the northern provinces of China. Others, however, consider them to be only two of several cultivated varieties of one species. Having examined the plants in the nurseries in this country, and seen that they differed greatly from each other, and learnt that they had long retained their characteristics; and that the *Thea viridis* was much more hardy than the *Thea Bohea* in this country, I coincided in opinion with the above authorities, and have as yet seen no reason to change my opinion. In the summer I went with Dr. Falconer to the Royal Botanic Garden at Kew, for the

express purpose of examining these plants, as well as the tea-plant of Assam. We agreed that all three appeared to be as distinct as most plants are which are considered to belong to different species. It would however be sufficient for practical purposes, to take the plants which the Chinese themselves employ to make the different kinds of tea, and cultivate them in the soil and climate which seem most similar to their own. It would be interesting, nevertheless, to sow the seeds of these three plants in two or three different situations, in Upper Assam and in Kemaon, but all under similar circumstances in each situation, and to watch the change from or retention of the present characters of each in different soils and climates.

Another great difficulty, and which is hardly yet entirely resolved, is, whether the black and green teas of commerce are the produce of two distinct plants, or whether they are dependent entirely upon processes of manufacture. Mr. Pigou long since stated, that Bohea may be cured as Hyson, and Hyson as Bohea. Mr. Reeves informed me that he believed this information applied to "a species of tea grown in the province of Canton," which can be coloured and made up to imitate various qualities of green tea, as large quantities are yearly thus made. But he himself considered that the genuine green and black teas were the produce of different plants, growing at a distance from each other. This opinion I considered the most likely to be the correct one, from the great attention which Mr. Reeves had paid to such subjects when at Canton. We are still without any positive information from the districts where the best black and green teas of commerce are actually prepared; and I have therefore been unable to ascertain what value the Chinese in these districts, place upon different varieties of plant. But we have now sufficient evidence to be assured that both good black and good green teas may be made from the same plant, and the latter without the aid of colouring matter.

Feeling well assured that the above gentlemen were far from right in their inferences, I was content to leave to time, and to the diffusion of more accurate information respecting China, the corroboration of my own opinions, and this more especially as the conduct of the experiment in the Himalayas was to be under the superintendence of Dr. Falconer. Mr. Gordon, moreover, had been sent from Calcutta to join Mr. Gutzlaff in China, for the purpose of acquiring information respecting the cultivation and manufacture of tea in that country, at the same time that they procured seeds or plants of the most genuine kinds. They succeeded in visiting some hills in the Amoy district, where tea was cultivated. From these they obtained some Bohea tea seeds; and though they failed in visiting the tea districts of Fokien, they ob-

tained further supplies of Bohea tea-seeds. I have been unable to ascertain distinctly from what place these seeds were obtained, nor whether the term Bohea refers to the district, or to the plant which was supposed to yield Bohea tea. They were unfortunately recalled while proceeding to the northward, where they might have been more successful, and, at all events, have obtained seeds and plants of a more hardy nature. The tea-seeds arrived in Calcutta in January, 1835, and produced numerous plants, which were dispatched to the districts where it had been determined to establish tea nurseries, that is, to Assam, and to the Kemaon and Gurwahl portions of the Himalayan Mountains. I had recommended several situations, as Bheemtal, Hawulbagh, Deyra Doon, and Pinjore, in valleys elevated from 2,000 to 2,500 feet; Almora, Jurreepanee, Nahn, and Sabathoo, at elevations of from 4,000 to 5,000 feet; and one locality, Mussooree, at 6,500 feet of elevation, in 30° of north latitude. Dr. Falconer, without any communication, selected Chejooree, Rama Serai, and Koth, at elevations of 4,000, 5,000, and 5,300 feet; with two situations, Ruroo and Bechur-bagh, in Sirmore, at 5,100, and 5,400 feet. He subsequently selected the valley called Deyra Doon, elevated 2,500 feet, as a favourable site, especially after irrigation had been facilitated by the establishment of canals. Sites were at the same time selected in Kemaon by the Commissioner, Mr. Traill, and placed under the charge of Mr. Blinkworth, a plant collector of the Calcutta Botanic Garden, until October 4, 1839, when he was placed under the general superintendence of Dr. Falconer. One nursery was established at Bhurt-pore, between Bheemtal and the Ghagur range, at an elevation of 4,500 feet; and a second nursery at Luchmaisor, near Almora, at 5,200 feet of elevation. The general directions given by the Calcutta Tea Committee were, that "a decided winter climate of six weeks or two months duration, with frost as well as snow, is essential to ensure final success with really good sorts of tea."

From the tea-seeds which arrived in Calcutta in January, 1835, numerous seedlings were raised, but comparatively few reached the tea nurseries. Thus of "20,000, which were dispatched a few months after germination, by boat up the Ganges, for the Himalayan tracts, 90 per cent. died in transit to the nurseries." A quantity of seedlings of the same batch was forwarded at the same time to Assam. Of these 12,000 were seen by the Assam deputation in February, 1835. These were removed to a nursery at Cheykwa; but in the following August not 500 of them were alive. Of the seeds which were sent to Dr. Falconer not one vegetated. But tea seeds cannot be long kept in a sound state.

Before proceeding to detail the results obtained by the establishment of these nurseries, I may briefly state, that a favourable opportunity having occurred when treating of the Productive Resources of India, in 1840, I took a review of the whole question in that work, from p. 257 to p. 311. I was so far from being discouraged, that, I stated, "as Dr. Falconer has expressed his confidence in the success of the culture in the northern parts of the Himalayas, several hundred miles from Upper Assam, and that of the author remains undiminished, we may confidently look forward to having tea cultivated all along these mountains. Thus affording profitable employment to the inhabitants, and to them as well as to the dwellers in the plains, the means of obtaining a cheap and refreshing beverage, which they already highly esteem; and by these means give an impulse to the commerce and agriculture both of the plains and of the mountains." In a note (p. 311), I stated:—"The botanical results confirm those deduced from the climate, that the tea-plant may be cultivated as well in the mid-region of the Himalayas, as in Upper Assam. The growth will no doubt be more slow, but the leaves will probably be not less high-flavoured."

Dr. Falconer having been deputed to investigate the natural history of Cashmere and of Tibet, no report was published on the results of the growth of the above plants; but on the 1st December, 1838, he informed me in a letter that "the tea-plant was thriving vigorously in two, and had flowered in three of the above nurseries;" and again on the 18th May, 1839:—"I have now plants growing at Saharunpore, the produce of seeds from the Koth nursery;" and gave it as his opinion, even at this early period, that they would be able to grow tea cheaper than in China. On the 21st April, 1841, he gave the following details respecting the increase of the plants, and stated that 30,000 seeds had been sown in the year 1840.

Tea Plants at Bhurtpore Nursery, (4,500 ascent,) Bheemtal, and the Ghagur Range, with a Northern Exposure:—				Tea Plants at Lutchmaisir, near Almo- rah, and on the N. W. side of the Almora Ridge, at about 5,200 feet:—			
Original plants, the produce of seed- lings introduced in 1835				Original plants of 1835			
Layers of 1838 transplanted in 1839				Layers of 1838 transplanted in 1839			
" 1839 " 1840				" 1839 " 1840			
" 1840 " 1841				" 1839-40, not transplanted			
Seedlings of 1840				Seedlings of 1839			
				" 1840			

speaking generally, to be in a better state than those at Bhurtpore, many of the original ones having grown to bushy plants about five feet high, though they had been prevented from branching out much by the number of layers which had been taken from them. The greater success at Lutchmaisir he ascribed partly to its superiority as a site, and partly to Mr. Blinkworth residing in the neighbourhood, which enabled him to give it more personal superintendence. The results he considered upon the whole most encouraging as regarding the prospect of successful culture of the tea-plant in the Himalayas. "The tea-plants grown from China seed have now been several years in the ground exposed unprotected to every change of the season; they have grown freely, in many cases vigorously; and they are now producing seed in such abundance, that in the course of a few years extensive plantations might be clothed with their progeny without the necessity of introducing seed or plants from any other quarter," though he "would not advise the extension of the culture being left to these means; for the seed, although they germinate freely, are generally smaller than their originals, and the produce will be affected by the seed. For some time to come, the plantations ought to be stocked by means of annual importations of the best kind of seed from China." He had before stated that "the brilliancy of the discovery of the indigenous plant in Assam very naturally concentrated the attention of the Tea Committee upon that quarter; and after the recall of Mr. Gordon from China, but feeble efforts were made towards furnishing the Himalayan nurseries with fresh supplies of China seed. They were left in a great measure to work on with the weakened remains of the first dispatch." At the time this report was written, Dr. Falconer was proceeding to examine the tea nurseries which he had established in Gurhwal, but he stated generally that the results were similar to those obtained in Kemaon.

In regard to the quality of the produce, everything required to be done. Dr. Falconer wisely abstained from attempting to manufacture tea from the imperfect accounts that had been published, observing "It is well known that tea manufacture is a peculiar process which requires skill and tact in the firing, twisting, and other manipulations to which the leaves are subjected. Were unpractised hands to attempt it by following written directions, although they might ultimately blunder into expertness, still a failure in the first instance would, in all probability, be the result, and discredit would naturally, though unfairly, fall upon the produce." He therefore concluded with the following recommendation:—"I beg leave, therefore, strongly to recommend to the favourable consideration of Government, that two

complete sets of Chinese tea manufacturers be supplied for the nurseries at Kemaon and Gurhwal, especial care being taken in the selection that these workmen be of the best description."

The Chinese plants, or those produced from the Chinese seed, were at this time also well established at Dinjoy, in Upper Assam. Mr. Watkins, late Superintendent of the Government tea nurseries, stated in 1841 that plants had been carefully cultivated from their seed; but in that year he collected from them leaves sufficient to manufacture two pounds of tea. He reported very favourably of the quality of this tea, as contrasted with the produce of the native trees grown in the Government Barrees, or tea plantations.

In consequence of the foregoing application made by Dr. Falconer, the Indian Government determined upon sending him a small manufacturing establishment. The black and green tea manufacturers, however, who were engaged for this purpose by the Commissioner of Assam, subsequently declined, together with their Superintendent, to proceed to Kemaon. Dr. Wallich was fortunately enabled to procure other men in Calcutta, out of a party of Chinese artisans returned from Assam. A set of manufacturing implements were also procured from Assam at a cost of 77 rupees. These were forwarded to Kemaon in charge of Mr. Milner, the gardener who had been sent from this country and was on his way to the Botanic Garden at Saharanpore.

The Chinamen (nine in number) arrived at their destination in April, 1842. They united in maintaining that the tea-plants of the Kemaon plantations were the genuine cultivated Chinese plant, and far superior to that growing wild in Assam; but though six years old, they did not consider them in a fit state to yield proper tea-leaves. They therefore proposed at the close of the rains* to cut down the plants to a level with the ground, in order that in the spring of 1843 new shoots should spring forth, as these are alone fit for making into tea.

The Chinamen, however, made some tea in the autumn of 1842. Dr. Falconer was unfortunately taken ill this very season, and obliged to leave Saharanpore in December, 1842. He arrived in England in June, 1843, having been detained in the south of Europe from ill-health, and brought with him to England some of this, the first specimen of Kemaon tea. Having submitted it for examination to the eminent tea-brokers, Messrs. Ewart, Maccaughy, and Delafosse, of Copthall Court, they stated on the 8th of September, 1843:—

"The tea brought by Dr. Falconer as a specimen of the growth of the China plant in the Himalayan mountains, resembles most nearly the description occasionally imported from China under the name of

Oolong. This resemblance is observable in the appearance of the leaf before and after infusion. The colour of the liquor is also similar, being paler, and more of the straw colour than the general description of black tea. It is not so high-flavoured as the fine Oolong tea with which we have compared it, and has been too highly burnt in the preparation, but it is of a delicate, fine flavour, and would command a ready sale here."

Though this was probably the first tea manufactured, it was not the first Kemaon tea reported on; for Dr. Falconer having, from his serious illness, been relieved from his duties by Dr. Jameson, the present Superintendent, the latter wrote me, on the 12th October, that "The tea plantations in the Deyra Doon and Kemaon are thriving admirably;" and on the 20th January he forwarded to me a small canister of probably the same tea, of which he also sent some to Calcutta. The latter was reported on by members of the Chamber of Commerce, who pronounced the tea to be a very good marketable article, and worth in London about 2s. 6d. per lb. The specimen sent to London was reported on by Messrs. Thompson, of Mincing Lane, and pronounced to be "of the Oolong Souchong kind, fine flavoured and strong. This is equal to the superior black tea generally sent as presents, and better, for the most part, than the China tea imported for mercantile purposes." This report reached Dr. Jameson in September of the same year, and was "most gratifying" to him.

Dr. Jameson having proceeded to visit the Kemaon tea nurseries, reached them in April, 1843, when he found them "looking admirably, and the Chinamen employed in manufacturing black (Pouchong) tea;" which he states "appears to be of a much superior quality." On the 30th August there were forwarded by the overland route sixteen small canisters of the above tea, covered with wax-cloth to protect it from wet. The wax unfortunately gave a little of its flavour to the tea, as the canisters got injured, and did not arrive at the India House before the month of December.

The reports on these teas, which were submitted to Messrs. Thompson and Son, and to Mr. Wm. Andrews Hunt, are extremely favourable. The former, on the 16th December, 1843, observes that the samples are all more or less affected by the wax-cloth in which the canisters were wrapped. Their valuations, as given in the margin*, are grounded on a supposition that the qualities of each sort will be moderate, for

* No. 2, small, even-curved, well made, black leaf, fine tea, of the Oolong class, somewhat like that of fine black-leaf Pekoe, from 2s. 6d. to 3s. 6d.

No. 4, a largish, even, rich, blackish leaf, Oolong kind, mixed with a fine, pale leaf. The leaf of the usual size of China Oolong, from 2s. 6d. to 2s. 9d.

as fancy teas can only be used to a limited extent, the value depends materially upon the amount of import.

Mr. Andrews Hunt, formerly Inspector of Tea to the East India Company at Canton, considered No. 2 well made, smallish, blackish, wiry Tetsong kind of leaf. No. 13, much as sample No. 2, but not quite so well made. No. 4, as the Chinese Tetsong Tea. No. 9, as the Ouchain of Sonchy tea. The smell of these teas he considered like that of China tea, but rather burnt, much of the Tetsong kind. The taste as fragrant, true, fresh Tetsong. The colour of the infusions of 2, 13, and 4, as very good as Tetsong tea; and that of No. 9, light and clean as Sonchy tea. He estimated the sale value per lb., according to the then price of China tea of corresponding quality, viz.:—

	s.	d.	s.	d.	
No. 2 from	2	9	to	3	0 per lb.
13	2	9		..	
4	2	3		2	6
9	1	2		..	

The expanded leaf Mr. Hunt considered to be identical with the Chinese plant, but of rather a greener hue; and he observes that the flavour and other characteristics of the leaf of the tea-shrub of Kemaon, are identical with the China plant grown in Oan Khy. (Ankoy.) the district which produces, in Chinese estimation, a more highly-prized article than does the Voo Yee Shan, or mountainous parts of the Bohea district. The appearance and flavour of the best (No. 2) of the four samples are unexceptionable; and while the former does great credit to the Chinese manufacturing operators, the latter fully justifies their opinion that the tea-shrub in the Kemaon plantations is the genuine Chinese plant, and far superior to that grown in Assam.

With regard to these reports, considering that they were made on the first results of an old culture and manufacture, introduced into a new situation, they are as satisfactory as could be expected. It is curious that the tea-brokers should have compared these Kemaon teas with the Tetsong, Oolong, and Sonchy teas of China, which I am informed by Mr. Ball are all Ankoy teas, because this is the very district from which Mr. Gordon probably obtained the original tea.

No. 9, a large black and pale mixed leaf, like Padree Souchong, but scarcely so well made as Padree usually is, from 1s. 6d. to 1s. 9d. This is a fine tea, but not esteemed in this market on account of the paleness of the leaf.

No. 13, the same class of leaf, but coarser, about Souchong size, Oolong kind, from 2s. to 2s. 2d.

seeds. (Mr. Ball does not agree with Mr. Hunt in considering that the Anko teas are more esteemed by the Chinese than those of Voo Yee Shan, the mountainous parts of the Bohea district). If this permanence of character should be dependent on the plants themselves, it would be extremely encouraging for the introduction of seeds from other, but especially the northern parts of China, of which the climate is probably more similar to that of the slopes of the Himalayan mountains. But this common character of Anko teas may be due to the manufacturers having been procured from that district.

At this period I was induced, principally at the suggestion of the Earl of Auckland, to give a lecture at the Royal Asiatic Society on the evening of the 24th of April, on the progress and future prospects of tea culture in the Himalayas. On this occasion many of the foregoing facts were detailed, and it was stated that the latest letters from Dr. Jameson continued to give the most favourable accounts of the tea nurseries. Captain Cantley, moreover, having visited those of the Deyra Doon, wrote: "I saw the Government Garden near Kowlagir, in which there were 4,000 plants growing most luxuriantly, the whole in full blossom. I believe that the whole of these, with the exception of a few brought from the hill plantations, are seedlings; and certainly, as far as luxuriance of vegetation goes, I never saw anything so promising in my life. There cannot be a doubt of the tea growing luxuriantly in all this part of the Doon,—I mean from Deyra to the Nulhwala Ghat." At the conclusion of this address I stated that I felt no hesitation in repeating what I had stated in my "Essay on the Productive Resources," in 1840, "that I confidently looked forward, not only to having tea cultivated all along these mountains, but also to its being finer flavoured than that grown in Assam." I also gave it as my opinion that tea-culture might be introduced round the villages, and even along the margins of the terraced cultivation of the Himalayas, and that tea might be manufactured extensively, cheaply, and of excellent quality, though at first probably most profitably in the elevated valleys at the foot of the Himalayan mountains.

Dr. Falconer, who was present on this occasion, also addressed the meeting, and gave his reasons for the opinions which he had so long entertained, and dwelt especially on the suitability of the Deyra Doon for an extensive and profitable culture; as he felt convinced that good tea could be produced there cheaper than in China. This valley he considered particularly eligible, as there is a sufficiency of cleared land, moderate in rent, with abundance of cheap labour in the vicinity, great facilities for irrigation, easy access to the Ganges and

Jumna rivers, by which the produce might be conveyed for three-fourths of a penny per lb. to Calcutta. He dwelt particularly on these points, because deficiency of land and of cheap labour, as well as the expenses of conveyance to Calcutta, had been the last started objections to the complete success of an experiment, which had in other respects done so well, and baffled the anticipations of those who contemplated failure, from the unsuitableness of the climate for the growth of the plant.

The subsequent history of the progress of the tea-nurseries, and of the culture in Kemaon and Gurhwal, I derive from Dr. Jameson's letters to myself, and from his reports, the principal of which have been published in the journals of the Agricultural and Horticultural Society of India. In all these are especially displayed the energy and judgment with which he has pursued this interesting and important subject. In his report, dated the 28th of February, forwarded by the Secretary of Government, North-West Provinces, on the 27th of March, 1844, to the above Society, he gives a full account of the number and extent of the nurseries in Kemaon, the numbers of plants contained in them, with some notice of the manufactory.

In addition to the nurseries at Bhurtpore and Lutchmaisir, Dr. Jameson, paying due consideration to the geological structure, soil, locality, &c. had established others, as one of thirty-five acres, Kooka-sar, elevated 4,200 feet, and near the Bhurtpore nursery, near Bheemtal; a second, Anoo, in the same valley as the last, and only separated from it by a small stream that drains it in the rains. He added ten acres to the nursery at Russeeah, which is elevated 4,200 feet, and surrounded by mountains on all sides except the south-west, and is in the neighbourhood of the Tal, or Lake of Now-Chouncee. These nurseries are the first met with in the Chekata district, on ascending the hills by the Bhamouree Ghat, distant about ten miles from the plains. Dr. Jameson also added one acre to the Kupeena nursery, elevated about 5,200 feet, and situated on the acclivity of the Almorah ridge, and adjoining the Lutchmaisir nursery. He also established a nursery of twenty acres at Hawulbagh, and subsequently one at Chullar. These are both situated in the valley of Hawulbagh, adjoin each other, and are elevated about 3,900 feet. "The increase of young tea-seedlings, during the last season, has been 112,392, or equal to four times the number reared since the nurseries were established in 1835-36. Of these, however, 12,201 have been already planted out in different nurseries, leaving 97,191 for transplanting. These, giving five feet to each plant, will cover about fifty-six acres of land. The tea-leaves are gathered by the mallee-

(gardeners) of the establishment, under the direction of the Chinamen. The seasons for doing so, and making tea, are April, June, July, September, and October, which may be styled the spring, rainy, (summer) and autumn crops. Much the largest quantity was collected in the rainy season, seeing that of the 190 lbs. of tea manufactured during the year, 141 lbs were then made." "The number of the tea-bearing plants amounted last year to 4,366." The tea manufactured, he states, will be transmitted in a few days, in compliance with the wishes of Government of the 30th of August last. The delay which has hitherto occurred, has been caused by the want of tea-canisters. Dr. Jameson further states, that he had been unable to commence manufacturing green tea from the want of implements, which, however, he has no doubt could be made at Almorah, as has been done with those for the black tea, as soon as patterns have been obtained. A tea-case maker was also required, whom he recommended should, in the first instance, be obtained from China, to ensure good packing, upon which so much depends. The only manufactory for tea was at that time at Hawulbagh, to which the tea-leaves were conveyed from the different nurseries; but he recommended the establishment of another manufactory at Bheemtal, to prevent the injury of the leaves, caused by their being conveyed a distance before being manufactured. With respect to the future prospects, Dr. Jameson states, that the experiment, as far as it has been tried, has fully realised the most sanguine expectations, and adds, "There are vast tracts, both in the provinces of Kemaon and of Gurhwal, equally well adapted for the growth and culture of the tea-plant as those where it is now thriving."

In China the tea-plant growers are a different class from the tea manufacturers. So in the Himalayas, it is to be hoped that the villagers will be induced to cultivate the tea-plant, as it "is most hardy, and does not require much care in cultivation." Others will learn to manufacture, and offer their services from village to village. There will be no deficiency of labour whenever there is a regular demand, as the hill people are constantly travelling about in search of employment. He further recommends, in order "that the increase of the nurseries may be adequate with the demand, it would be most desirable to introduce, from time to time, tea-seeds from China in quantity." The Government nurseries now yield a vast quantity of seeds. The plants now amount to 150,000, and these will be doubled or trebled annually.

With reference to the cultivation in the neighbouring district. Dr. Jameson observes, "Nor is the state of the tea-plant in Gurhwal less promising. The nursery at Pooree, established last season, contains

about 2,500 plants, in a thriving condition. The nursery at Kaolagir, in the Deyra-Doon, contains about 4,500 ; and here the plant is thriving as well as in any of the other nurseries. If the leaves yielded by the plants in this locality are fitted for making tea of a superior quality, a vast field for enterprise will be opened up." Dr. Jameson was necessarily doubtful of this at first, because the tea grown at low elevations in China is said to be inferior.

In a letter, dated the 1st of July, 1844, Dr. Jameson, after having inspected all the nurseries, wrote me that at Koth, Rama-Serai, and Gadowlee, in the Gurhwal Hills, the tea-plants are thriving admirably, many of them being nearly six feet high. On the 18th of October he informed me, that the China tea-manufacturers deny that green and black tea are made from different plants ; the difference is in the manufacture, and that they were only waiting for the arrival of green tea implements, to manufacture green tea from the same plants from which the black tea had been prepared. And, in a subsequent letter (20th March, 1845), he stated that no gypsum or indigo would be allowed, in order to determine whether green tea can be made without colouring ingredients. On the 25th of January he informed me, that many of the tea-plants were seven and eight feet high ; that 436 lbs. of tea had been made, and that three acres of land yielded 162 lbs. of tea ; that he had then 120 acres under cultivation, and hoped soon to have 300 acres in the same state ; also that the Government had sanctioned the removal of two of the China men to the Deyra Doon, to manufacture tea from the plants growing there. On the 20th of March he states, that he had endeavoured to induce the Government to get fresh tea-seeds from different parts of China, as he coincided with me in the opinion, which I had expressed to him by letter, respecting the necessity of getting tea-seeds from the northern districts of China.

On the 31st of July, Dr. Jameson furnished the Government of the north-west provinces, with a detailed report on the state and prospects of the tea nurseries in Kemaon and Gurhwal. This report was directed by the Honourable the Lieutenant Governor to be forwarded to the Agricultural and Horticultural Society of India ; and it is published in vol. iv., p. 173, of their Journal. From this report we learn, that to the nurseries in Kemaon, since the last report, seventy-six acres of land had been added ; and that 94,100 plants had been planted in them. In September and November upwards of four lacs of seeds had been sown,—of these 167,000 had already germinated, and they were still daily germinating, so that this season there will be sufficient numbers of young plants to cover eighty or ninety acres ; the additions

contemplated will amount to forty-seven acres. With respect to the production of tea, he states that,—“The tea-plant does not yield leaves until the third year; no doubt some, more forward than others, do; but I think that pulling leaves when the plants are so young, is detrimental to their rapid growth. From the third year it gradually increases its produce until the eighth or tenth, at which time it attains its maximum.” * * * “Kutchra, or green leaves, yield one-fourth this quantity of prepared tea.”

“The quantity of tea manufactured has steadily increased, amounting last season to 375 lbs., being an increase of 185 lbs. on the former season. The oldest nursery, that of Lutchmaisir, consisting of little more than three acres, in which there were only 2,560 plants capable of yielding leaves, (the remaining 4,760 being too young,) produced 166 lbs. 2 oz. of tea, or 2 maunds 2 lbs. As the plants become older, and all of them in each nursery capable of yielding leaves, the returns will necessarily and very rapidly be greater. Dr. Jameson calculated that eventually an acre of ground will yield a maund, that is forty seers, (or upwards of 82 lbs. of tea). This being sold at a rate of three rupees per seer, (or about 3s. per pound,) will yield 120 rupees. The cost of producing the leaves amounts to about nineteen rupees per annum. One gardener, or mallee, at four rupees a month, is capable of managing three acres of land. A single acre, therefore, will cost sixteen rupees + land rent, three rupees = nineteen rupees per annum; and thus a clear profit of 101 rupees to cover the expense of tea-making, &c. will be left.” Dr. Jameson further calculates, that as the number of acres in cultivation will this year be 165, they will yield, when in full bearing, 165 maunds of tea. This being sold at three rupees per seer, will realize 21,600 rupees. while the present expenditure in Kemaon is about rupees 10,595 5a. 8p., leaving a balance of rupees 10,004. “This balance, though good, is very far short of the amount that would be realized were the establishment better adjusted. Thus the present tea manufacturing establishment, with a small additional expense in picking, &c., is capable of making at the rate of from twenty to thirty maunds daily, or of manufacturing tea-leaves procured from 6,000 acres of land.”

The manufacturing establishment is larger than was necessary at the beginning, but the Chinese refused to proceed to Kemaon in a smaller number, and the nursery department was sufficient to carry out the experimental views of the Government. Dr. Jameson gives the following tabular view of the profit which may eventually be obtained from this culture.

The expenses of cultivating 6,000 acres	87,000	0	0
„ „ of making the tea	3,975	0	0
„ „ of packing the tea	2,259	0	0
Land-rent, carriage to Calcutta, &c. . . .	36,500	0	0
	<hr/>		
	129,734	0	0
To value of 6,000 maunds of tea, or	}	480,000	0 0
240,000 seers, at 2 rupees per seer . .			
	<hr/>		
Or, say that the tea sold at rupees 1·8 per seer		360,000	
Expenditure		129,734	
	<hr/>		
Balance		230,266	
	<hr/>		

In a subsequent part of the report we have information respecting the Gurhwal nurseries. These consist, 1st, that of Kaolagir, before mentioned as having been established by Dr. Falconer, in the Deyra Doon, as being a particularly eligible situation, on account of the abundance of cleared land available for the purpose of tea cultivations. We have already seen that the plants introduced there continued to flourish quite as well as at any of the other nurseries. Dr. Jameson reports, that at this time the nursery consisted of six acres, and contained 8,000 plants. The nurseries at Koth, in the Bhuddree valley, elevated about 5,000 feet, contained 729 plants; and the Rama Serai nursery, in the valley of that name, at about the same elevation, 728 plants. Of these, 287 in the former, and 180 in the latter, consist of the plants originally grown in Calcutta from the seed imported from China. In both these valleys snow falls, and in the latter frequently to the depth of two to three feet, lying on the ground for a period of six weeks, and yet the original plants have not only survived but flourished, affording useful information for the extension of the cultivation in other situations. Dr. Jameson, in 1843, had established another nursery in a situation having something of a similar climate, that is, at Gadowlee, in the neighbourhood of Paoree, elevated about 5,300 feet above the level of the sea. In 1845 this nursery consisted of three acres, and contained 5,000 plants. He also mentions in this report, that in compliance with the orders of Government, three Chinamen were employed in making tea at Deyra, some of which would be transmitted to Government, for the opinions of judges in England and in Calcutta. He likewise states, that a sale of 173 seers had taken place at Almora on the 12th of July, of which the results were highly satisfactory, the average amount realized per seer being

rupees 4 8a. The maximum price for Pouchong was rupees 5 1a. For Bohea the maximum, rupees 4 8a., minimum, rupees 3 2 annas.

Before making any observations on Dr. Jameson's calculation or the satisfactory results which have been obtained, I will proceed with a relation of the progress of this important culture; this I am enabled to do from the letters with which I have been constantly favoured. On the 18th of October he forwarded to me a small canister of the tea which had been prepared in the Deyra Doon, stating that it had not been prepared above six weeks, which ought to be taken into consideration when opinions are formed on its quality, as China tea is seldom drunk before it is at least a year old. The Chinamen pronounced it to be identical in quality with that which they had prepared in the more elevated nurseries of Kemaon. Mr. R. Twining was good enough to examine this tea, and informed me on the 23rd of December.—“I have carefully tasted your sample of Himalaya tea, and I really think it a promising specimen. The flavour is not strong, but it is delicate and pleasant,—a little, methought, of the *Orange Pekoe* character. The complexion of the leaf is rather good, and pains seem to have been taken in the manipulation.” This account reached Dr. Jameson by the 5th of February, 1846, when he expressed his delight at the gratifying report which had been made on the Deyra Doon tea, as that settled the question of extension, and of profitable culture and manufacture. At this time the Government authorized *kutchra*, or fresh tea-leaves, being bought from the natives in order to encourage them to cultivate the plant in the grounds of their respective villages.

A further supply of this tea, grown and manufactured in the Deyra Doon, having been forwarded to the Court of Directors, was submitted to the inspection of Messrs. Thompson and Sons, Mr. Hunt, and Messrs. Ewart, Maccaughy and Co., in June 1846. Messrs. Thompson state that—“The leaf is well made, curled, of the Ankoï Pekoe class, mixed black and brown, and closely resembles that class of China tea. The flavour is very strong, and would therefore be serviceable for mixing; but is ‘coarse burnt’ so that all richness of flavour is destroyed.” The Messrs. Ewart:—“The sample of tea marked • as manufactured in the Deyra Doon, August, 1845, in leaf somewhat resembles the tea imported from China as Ning Yong, with something of the character both of Oolong and Orange Pekoe. In flavour it much resembles the better description of Orange Pekoe, having with the brisk burnt flavour of that description, more than its usual strength.” Though they object to a slight peculiarity of smell and

flavour, they pronounce it to be "a good, useful description of tea." Mr. Andrews Hunt gives its characteristics under different heads; as of *appearance of tea*; well made, as well as China tea, and similar to the blackish, mixed, curled Tetsong description. *Smell*; as China tea, but deficient in fragrance, arising probably from some defect in the firing. *Colour of the infusion*; bright and good. *Taste*; rich, good, and strong. *Expanded leaf*; as the finer teas from China. *Aroma*: as good China tea.

The Honourable Court remark as follows on these results, in their dispatch of the 22nd September, 1846, which is published in the Journal of the Agricultural Society of India, vol. vii., selections, p. 14:—

"5. These specimens are very creditable to the efforts of the superintendent, Dr. Jameson, and his establishment.

"6. The latest report of Dr. Jameson shows the quantity of land under tea cultivation, in the districts of Kemaon and Garhwal, including the Deyra, to be 176 acres, and the total number of plants, 322,579. The plant is stated to be thriving in different localities, extending over four degrees of latitude and three of longitude, and that 100,000 acres are available in the Deyra only, for the purpose of tea cultivation.

"8. We feel a deep interest in this subject, and attach great importance to the success of a project from which considerable advantages would arise to the agricultural community of these districts, who would, it is stated, readily undertake the cultivation of the plant, if encouraged to do so."

In connection with the progress of these northern nurseries may also be mentioned that the China tea plant originally introduced by the Government into Assam, has continued to flourish, and that some of the Chinese tea-makers who have settled there, have prepared some excellent Pouchong tea at Jeypoor in Upper Assam. The results obtained in all the situations where the culture and manufacture of black tea had hitherto been attempted, has been as successful as could have been expected, or even wished, and that judging even by the opinions of the best judges in this country. That it is not less highly esteemed in the place of its production may be inferred from the prices obtained when any of it has been put up for sale. A sale of tea took place in July, 1846, at Almora, with considerable increase in the prices. The average price was rupees 6 14a., and some of it sold as high as rupees 7 7a., that is, something more than seven shillings a pound, without any duty; and it was a further gratifying fact that most of the tea had been purchased by natives. From want of sheet lead Dr. Jameson was unable to send any of this tea to the Court of

Directors. He also informed me that some green tea had been made; that he had never seen any finer; and that he had not allowed any foreign ingredient to be used in colouring it.

By the September mail of this year Dr. Jameson forwarded to me two small canisters of tea, one containing black, the other green tea, as specimens of the progress they were making, and to obtain the opinions of good judges on the quality, especially of the green tea. Having submitted these specimens to Mr. R. Twining, Mr. Hunt, and to Messrs. Ewart, Maccaughy and Delafosse, they were good enough to examine, and pronounce the following opinions on them:—

“ My dear Sir,

“ *Strand, 25th January, 1847.*

“ I am not quite sure that I read your note aright, but I rather understand it to say that the two samples which I have tasted are from the same plant.

“ I should not have thought so, either from the taste, the dry leaf, or after infusion. The taste of the black has a little of flavour which does not so decidedly belong to that class; but the colour is that of black (Congou) tea. The wet leaf shews it to be much broken.

The green tea seems to be a better sample in leaf, (at present *pale*,) wanting only more colour to be fair gunpowder, but it draws a good green-coloured liquor, which it might in some degree lose if to the leaf itself more colour were to be given. The wet leaf seems much more perfect in the green than in the black sample.

“ Believe me, truly yours.

(Signed)

“ RD. TWINING.”

:

“ *East India Warehouses,*

“ My dear Sir,

“ *15 March, 1847.*

“ Having tested the samples of black and green tea grown and manufactured by the East India Company, I beg to offer my opinion upon their quality.

“ The black tea has in its appearance the China tea characteristics, and is as well made as that of the finer description from the Oan-Khy district, but it has been injured in the curing, having acquired an ‘oveny’ smell; in flavour it partakes of the peculiarity of the Oan-Khy tea, being soft and agreeable.

“ The green tea (gunpowder) is also as equally well manipulated as the China description, but like all the samples which I have seen of green tea manufactured from the black tea shrub, it is deficient in the richness of appearance and silkiness of touch which characterize the true green tea; in flavour too the difference is very marked, that

from the black tea shrub is 'coarse and brassy,' while from the green tea it is 'rich and nutty;' from these discrepancies I cannot think that the black is identical with the green tea-shrub, and it would be interesting to have the point decided, by planting in the Company's garden some seeds from plants grown in Gam-Kang.

"I am, &c.,

(Signed) "W. ANDREWS HUNT."

"To Dr. Royle."

"The sample of tea marked 'Kupeena, 1846,' is much the same as the specimens of tea we have seen of former years growth from the same district, resembling the Ankoi teas, imported from China under the denomination of Ning-Yong, Oolong, and Orange Pekoo.

"The sample marked 'Green Machoo Tea,' is similar to the gunpowder tea imported from China; the leaf is rather paler, well-prepared, being round and even, but if made smaller it would command a higher price; the infusion is of that pale yellow, and the taste of that strong burnt character, which qualities are usually found only in the finest descriptions of Gunpowder tea; but it is not so high flavoured as the China tea. It is however, of a very useful description, and would sell well here.

(Signed) "EWART, MACCAUGHY & Co.,
"Brokers."

Copthall Court,
"20 April, 1847."

Mr. Warrington, of Apothecaries' Hall, having by microscopic examination and chemical tests discovered the nature of the colouring, and other matters which the Chinese employ for facing and artificially dyeing some of their green teas, I was anxious to obtain his opinion of the first sample of green tea that had been prepared in the North-western nurseries. The result of Mr. Warrington's previous examinations had been that of the two kinds of green tea known here as *glazed* and *unglazed*, the former he had found, in all cases that he had examined, dressed with Prussian blue and sulphate of lime, or kaolin, and the latter with sulphate of lime only, and these have an olive yellow tint, without any blue. Of the Assam teas which Mr. Warrington had obtained from the India House, he states that, "none of the Assam teas are glazed, but all have a white powder on their surface." His examination of the Kemaon tea gives similar results, there being no Prussian blue or turmeric, but only a little white earthy powder, as appears by his note. Dr. Wallich has stated to me that

the finely powdered 'gypsum is thrown upon the white, incandescent cinders of the fire, beneath the apparatus holding the tea. This apparatus, on the occasion when he saw it, was a plaited bamboo pan. Other accounts describe the powder as mixed with the tea. Dr. Wallich further informs me that the tea-makers from Canton lay the greatest stress on the use of the dye, probably Prussian blue, for giving the peculiar bloom to their superior green teas.

"*Apothecaries' Hall,*

"My dear Sir,

"25th November, 1847.

"I have to offer you a thousand apologies for neglecting the examination of the Himalaya tea before this. It was put away by me very carefully at the time I received it, for an early examination, and entirely lost sight of and forgotten until Mr. Ball asked me about it a week or two ago. I immediately set to work, and have now to give you the results. Under the microscope it appears to be covered with a dirty white powder, which is readily washed off, and appears to consist of some primitive rock, perhaps granite, in a disintegrated state; particles of silica are abundant, and a few minute flakes of mica; there is no appreciable quantity of lime, and no sulphate of lime, and it is also quite free from adventitious colour, as Prussian blue, turmeric, &c. Hoping this may prove satisfactory, and throwing myself on your good nature for my long neglect,

"Believe me, &c.,

(Signed)

"R. WARRINGTON."

"P.S.—Is it not too highly dried, and rather scorched in parts?"

"To Dr. Royle,"

Early in 1847, I had written to Dr. Jameson respecting the information obtained by Mr. Fortune, that he found the *Thea Bohea* converted into both black and green tea in the south of China, but that in all the Northern Provinces the *Thea viridis* only grown, and equally converted into both kinds of tea. This he acknowledged on the 31st July:—"The remarks of Mr. Fortune are both interesting and satisfactory; and quite account for the disputes which have arisen regarding the different species. For any one confining his attention to one district would of course be convinced that there was but one species. On the other hand another individual who had visited both districts, would come to a different conclusion." Hence the discrepancies in the accounts obtained by different individuals from the tea districts. He moreover states, that "the tea-plant in general cultivation here is the *Thea Bohea*. The true *Thea viridis* is not in the

plantations, but the variety from Assam ;" and further, that, "the tea this year will I think be very superior to anything yet made, as it has been manufactured and packed under advantages which were not procurable until now ; that is, there is now a sheet-lead maker attached to the manufactory." He concludes with, "I am now engaged in extending the tea plantations to 1000 acres."

On the 28th of August Dr. Jameson wrote me from Paoree that another sale of tea had taken place on the 9th August at Almorah :— "The amount realized for green tea varied from rupees 10 8a. to rupees 9 4a. (that is, more than 9 and 10 shillings a pound). For black tea the amount realised was rupees 7 8a. the maximum, and rupees 4 0a. the minimum." He continues: "I have just sent in a long report to Government on the state of the plantations, which has been forwarded to Calcutta for publication." "I am employed in extending the Gadowlee nursery, which though established only about four years, contains about a lac of plants in a thriving condition. All the other nurseries are equally progressing. The Government are about to cut the Kutta Pluthur Canal, in the western Deyra Doon." On the 4th October he states ; "I have just received orders from Government to form tea-plantations on the whole of the hilly districts of the North-west frontier, from the Sutledge and new country lately acquired west of that river, to the Ravi ;" and that he proceeds immediately towards Kangra to inspect and select sites. The Governor-General pronounces the tea to be as fine as any Chinese tea he had ever drank. Dr. Jameson concludes by stating his conviction that tea will shortly become a most important article of production from the North-west Provinces.

I entirely concur in this opinion, as it is indeed, only that which I have long entertained, and frequently promulgated. I have been gratified to find that the inferences deduced from scientific data have been fully borne out by the practical results. There is no doubt that if the best kinds of tea-plant are obtained from the northern districts of China, and with them a few manufacturers from the places where the teas most esteemed in commerce are prepared, and which are consequently those most in use by the British public, that any kind or quality of tea may be prepared as good and as cheaply in the Himalayas as in China. For we have an equal command of soil and climate, with cheap and abundant labour, unoccupied land at a low rent, with comparatively small expense of carriage even to Calcutta. But India itself, with other parts of Asia, will consume a large quantity of tea, when it is obtainable at a moderate price, and even if of a quality inferior to what has already been produced in the Himalayan mountains.

POSTSCRIPT.

Subsequent to the writing of this paper, Mr. Ball, late Inspector of Teas to the East India Company in China, published his work, intitled "An Account of the Cultivation and Manufacture of Tea in China." In this he has fully confirmed the statement first made by the Jesuits, and repeated by others, though contradicted by some, that both the green and black teas of commerce can be and are prepared from the same plant, and that the differences depend entirely on the processes of manufacture. Previous to this Mr. Fortune had ascertained by visiting the different parts of the coast of China, that the *Thea Bohea* was converted into both black and green tea in the south of China, but that in all the northern provinces he found only *Thea viridis* grown, and equally converted into both kinds of tea. But it is quite possible that the Chinese may prefer varieties of the same plant, in particular soils and situations, for the preparation of particular varieties of both black and green teas.

Mr. Ball, in his account of the *manufacture of black tea*, states that the leaves after being gathered are first exposed to the air, where they wither and give or "become soft and flaccid." They are kept in this state until they begin to emit a slight degree of fragrance, when they are sifted, and then tossed about with the hands in large trays. The leaves in each sieve are then collected into a heap, and covered with a cloth. "They are then watched with the utmost care, until they 'become spotted and tinged with red,' when they also increase in fragrance and must be instantly roasted, or the tea would be injured." In the first roasting of all black tea, the fire is prepared with dry wood, and kept exceedingly brisk; "any heat may suffice which produces the crackling of the leaves described by Kæmpfer." The roasting must be continued until the leaves give out a fragrant smell, and become quite soft and flaccid, when they are in a fit state to be rolled. The roasting and rolling are, often a third, and sometimes, with large and fleshy leaves, even a fourth time repeated; and it is only when juices can no longer be freely expressed in the process of rolling, that the leaves are considered to be in a fit state to undergo the final desiccation, in sieves placed in the drying tubs, above a charcoal fire in a common chafing-dish. During this process they begin to assume their black appearance. A considerable quantity of moisture is dissipated, and the fire is then covered with the ash of charcoal, or burnt paddy-husk, which both moderates heat and pre-

vents smoke. "The leaves are then twisted, and again undergo the process of drying, twisting, and turning as before; which is repeated once or twice more, until they become quite black, well twisted, and perfectly dry and crisp."

Mr. Ball, after detailing the variations required in the manufacture to produce the different kinds of black tea, proceeds to describe the *mode of preparing the green teas* of commerce. These he classes under the heads of Hyson and Singlo; all other kinds are made from these shrubs, and there is much reason to think that even the Hyson is merely the Singlo shrub improved by soil and cultivation." Of the manipulation he states that there are only two gatherings of the leaves of green tea; the first begins about the 20th of April, and the second at the summer solstice. "The green tea factors universally agree that the sooner the leaves of green tea are roasted after gathering the better, and that all exposure to the air is unnecessary, and to the sun, injurious." The iron vessel in which the green tea is roasted is called a Kuo. It is thin, about sixteen inches in diameter, and set horizontally, (that for Twankay obliquely,) in a stove of brickwork, so as to have a depth of about fifteen inches. The fire is prepared with dry wood, and kept very brisk, the heat becomes intolerable, and the bottom of the kuo oven red hot, though this is not essential. About half a pound of leaves are put in at one time, a crackling noise is produced, much steam is evolved from the leaves, which are quickly stirred about: at the end of every turn they are raised about six inches above the surface of the stove, and shaken on the palm of the hand so as to separate them and to disperse the steam. They are then suddenly collected into a heap, and passed to another man, who stands in readiness with a basket to receive them.

The process of rolling is much the same as that employed in the rolling of black tea, the leaves taking the form of a ball. After the balls are shaken to pieces, the leaves are also rolled between the palms of the hands, so that they may be twisted regularly, and in the same direction. They are then spread out in sieves, and placed on stands in a cool room.

For the second roasting the fire is considerably diminished, and charcoal used instead of wood, and the leaves constantly fanned by a boy, who stands near. When the leaves have lost so much of their aqueous and viscous qualities as to produce no sensible steam, they no longer adhere together, but by the simple action of the fire separate and curl of themselves. When taken from the kuo, they appear of a dark olive colour, almost black. After being sifted they are placed on stands as before.

For the third roasting, which is in fact the final drying, the heat is not greater than what the hand can bear for some seconds without much inconvenience. "The fanning and the mode of roasting were the same as in the final part of the second roasting. It was now curious to observe the change of colour which gradually took place in the leaves, for it was in this roasting that they began to assume that blueish tint, resembling the bloom on fruit, which distinguishes this tea, and renders its appearance so agreeable."

The foregoing being the general mode of manufacturing green or Hyson tea, it is separated into different varieties, as Hyson, Hyson-skin, young Hyson, and Gunpowder, by sifting, winnowing, and fanning, and some varieties by further roasting.

From this it is obvious, as remarked by Mr. Ball, that the peculiar colour of green tea does not properly arise from the admixture of colouring matter with the leaves, but naturally out of the process of manipulation; and by some experiments which Mr. Ball made, it appears that leaves while undergoing the third roasting in the same vessel, but kept separate by a thin partition of wood, became of a black or of a green colour, according as they were kept in a quiescent state or in constant motion. "The leaves kept in constant motion dried rapidly, and soon assumed the colour and appearance of green tea. The other parcel (kept in as quiescent a state as possible) required a much longer drying, and when completed assumed the colour of black tea" (p. 242). Mr. Ball enters fully into the subject of the chemical changes which take place, and on the cause of difference in the properties of black and green teas; for which and for much valuable and correct information his work must be consulted.

Though it has been proved that both black and green teas may be and are prepared from the same plant, it has also been shown from Mr. Fortune's investigation that the *Thea viridis* and its varieties are the chief, if not the only kinds, cultivated in the northern districts of China, where most of the more valuable teas of commerce are produced. As it was desirable to obtain seeds and plants from these very localities, means have been taken to insure this object, as well as to obtain further information on the subject of manufacture.

Since this paper was written, Dr. Jameson's report, alluded to at p. 184, has been published in the *Journal of the Agricultural and Horticultural Society of India*, vol. vi., part II. In this, a detailed account is given of the state of the several nurseries at the time. With regard to soil, Dr. Jameson states "that the tea-plant thrives well both in stiff and free soils, and in many modifications of these;" and with regard to elevation that "it thrives equally well at heights ranging from 2,200

feet above the level of the sea to 6000 feet." The quantity of ground then in cultivation was 162½ acres : also "that the minimum of return of tea for an acre of land may be estimated at one pukka maund, or 80 lbs." We have also the interesting fact stated, that though the Pouchong (black) tea sold at an average rate of Rupees 6, 8a. 8p. per seer, and that at least half the quantity sold was bought by natives, the coarse Bohea tea was reserved and sold to the Bhooteahs at a price varying from rupees 2 to rupees 2, 4a. per seer. "It has been purchased by them in order to carry it across the passes into Thibet. Nor will it be long, if the importation of Kemaon tea into Chinese Tartary is not prohibited, before that market is wholly supplied from the British provinces."

By one of the last mails, I have been favoured with a letter from Dr. Jameson, dated January 25, of the present year, in which he states that 2,656 lbs. of tea had been manufactured last year, and that of this he had just despatched 600 lbs. of black and green tea to this country, and that "it was finer-looking than any sent in former years;" also that "by the end of this season there will be 400 acres under cultivation at Kolaghir in the Doon;" and "at Paoree I expect to have 200 to 300 acres;" and that he has "about 250,000 seedling plants ready to transplant." "Last season I sent a lac (100,000) of the plants to the Kangra valley, where most of them are doing well;" while "the seeds collected from our own plantations this season amount to upwards of 2,000,000 (two millions). From the plantation at Deyra (Kolaghir) we shall be able, in the course of eight or ten years, to raise a sufficient number of plants to plant the whole Doon."

London, April, 1849.

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ART. V.—On the Rock Inscriptions of Kapur di Giri, Dhauli, and Girnar; by PROFESSOR H. H. WILSON, Director of the Royal Asiatic Society.

[Read 3rd February, 1849.]

THE circumstances under which the remarkable inscription at Shah bagheri or Kapur di Giri was discovered and transcribed by Mr. Masson, and decyphered by Mr. Dowson and Mr. Norris have been already detailed in a preceding Journal, vol. VIII, and it was then shown by a comparison of one of the divisions of the inscription with a similar division of those of Girnar and Dhauli, that they were all three substantially the same. The interest excited by this identification, and the possibility that some of the difficulties in the reading and translation of the earlier known inscriptions might be explained by the one more recently discovered, naturally recommended the prosecution of the inquiry and the complete collation of the several inscriptions. In the absence of any person more competent to accomplish so desirable an object I consented to undertake the task, and now lay before the Society the result of the comparison. It has not, I fear, added materially to our knowledge of the purport of these curious documents, but it leaves no doubt of the identity in all material respects of the records preserved by the rocks of Guzerat, Cuttack, and Afghanistan.

At the same time that this collation of the inscriptions was effected, I thought it would be a favourable opportunity to revise the translations made by the late Mr. James Prinsep, of those of earlier discovery, particularly as the Society was possessed of valuable corrections of the original readings made by Mr. Prinsep himself, although unpublished, and by Captain Jacob and Mr. Westergaard in an entirely new transcript of the original, made and published by them in the Journal of the Bombay Branch of the Royal Asiatic Society. As mentioned also on the former occasion, the Society was in possession of a fac-simile on muslin of the Girnar inscription, made by the Rev. Dr. Wilson of Bombay, and of copies presented by Mr. H. T. Prinsep and Captain Postans. Mr. Westergaard, also, was kind enough to furnish Mr. Norris with a copy of the same inscription, in which he corrected some of the typographic errors of the printed copy; and some further corrections have recently appeared in the

THE ROCK INSCRIPTIONS OF

Bombay Branch Society's Journal, for July 1847, by Captain Jacob.

With exception of the last, these

, these several transcripts and corrections of the Girnar inscription were embodied with great care and infinite labour in a new representation of the whole, and engraved on stone by Mr. Norris himself. This transcript is now given to the public.

We are in like manner indebted to the ingenuity and indefatigable perseverance of Mr. Norris for the lithographed copy of the Kapur di Giri inscription, and I cannot offer a more striking proof of the labour which it imposed, and of the carefulness with which it has been executed, than by inserting Mr. Norris's own account of the process by which he has rendered the inscription accessible to the public. This account is as follows:—

“The manner in which the cloth was applied to the rock of Shah baz gheri to take off a fac-simile of the inscription, has been detailed in p. 299 of the eighth volume of the Society's Journal. It is important to add that the palm of the hand was used to produce the impression; and that the operator, perceiving as he went along, how the lines ran, followed them closely, striking them more particularly in the centre. The effect of this has been that the space between the lines is often left white, and that the tops and bottoms of each letter are less perfectly impressed than the middle. The result is that the letter *r*, and the vocalic marks which should be affixed to those parts of the letters, are often wanting; and the reading is so far imperfect.

“In order to produce a transcript, the cloth was closely attached by pins to a sheet of paper twenty-four feet by twelve feet, and then carefully extended upon a large table, previously covered with sheets of paper smeared over with a black composition, the face of the cloth being uppermost, and the large sheet of white paper in contact with the blackened paper on the table. An ivory point was then passed over every visible mark of letters upon the cloth; and thus a reversed copy in black was produced upon the underside of the paper. As the impression upon the cloth was reversed by being taken from the rock, the copy on the paper being again reversed was restored to its direct position. From this paper, by means of a pantograph, a copy was made, reduced to one-sixth linear dimension; and this, though nearly two yards long, was more manageable than the first copy, which being above twenty feet in length, could not be examined without much trouble. Upon the reduced transcript corrections were made by a minute collation with the original calico, every letter of which was examined, both by reflected and transmitted light, and many thus rendered visible which were unseen at the first attempt.

After this was done, the several detached pieces mentioned by Mr. Masson as the first results of his attempts on the rock, were separately transcribed, and reduced by pantograph, as the whole inscription had been; and although the impressions on these pieces were on the whole far inferior to those on the large cloth, yet in several cases they gave a legible word or letter, which was very doubtful, or altogether invisible on the other. After this, the copy taken by the eye was collated with the one corrected as just stated; and although quite illegible alone, it was in many parts valuable by suggesting the true reading of a doubtful word; and in some cases giving a word wholly wanting on the cloth.

"To sum up the whole, although I am compelled to admit that in many places the inscription given is rather an attempt to restore what is visible upon the rock than a copy of the impression upon the cloth entrusted to me, yet the greater part is, as nearly as I could trace it, a fac-simile of that impression; and all this part is distinguished by a full, thick character, as upon the cloth. Wherever the reading was uncertain, either from faintness of the impression, or because the only authority was the copy made by the eye, the character is drawn with thin lines; and in those parts it was found in most instances impossible to distinguish between the resembling letters *r*, *t*, and *v*; *d* and *n*; and *bh* and *k*. So far then, and in the addition of the subjoined *r*, and of vowels, conjectural emendation is fully admissible. Even in the better parts the impression is not such as to insure perfect confidence. Such, in fact, is the copy of the cloth, partly arising from the rough surface of the rock when originally engraved, and its deterioration after the lapse of so many centuries, and partly owing to the imperfect means at the disposal of the gentleman by whom the copy was taken; probably also, in some degree, to damage sustained by the calico since it was impressed in 1838, the ink having apparently run over several of the characters and obliterated them, that many parts set down as certain, may hereafter, on examination of the rock, prove to be susceptible of correction.

"In one material particular the inscription given in the plate does not represent the cloth copy. The impression was taken upon cloth in separate pieces, which were subsequently sewed together under Mr. Masson's directions, upon that gentleman's return to Peshawar. As I proceeded on my task I found reason to suspect that some mistake had been made in sewing the pieces together; and this suspicion was confirmed when the inscription was found to resemble so closely those of Girnar and Dhauli. Four seams were found to be improperly joined; the direction of two of these, extending from the top to

the bottom of the cloth, will be seen by drawing lines from A to A, and from B to B in the fac-simile. In each of these cases the part on the left was shifted downwards, two lines below its proper place, so that, for example, the twentieth line ran first into the eighteenth, and then into the sixteenth. In the other cases, marked C and D, the pieces were smaller, and sewed on two or three sides. They were shifted on one side, and both so joined that some parts appeared in duplicate, and others were wanting: these gave more trouble than the others; but I believe they are now placed in their proper positions.

"In case it should be wished to elucidate any difficult passage of the inscription, or to remove any doubts of incorrect transcription, all the materials which furnished the accompanying lithograph may be seen at the Society's House. Very possibly a subsequent examination will discover errors in the work, or find some letters or words that may have escaped me; but, in any case, what is done will be useful in pointing out where correction is needed, and will materially aid any one who may have an opportunity of examining the rock itself. It is much to be desired that the remaining part of the inscription containing, perhaps, the twelfth, thirteenth, and fourteenth edicts, may be taken from the rock in fac-simile. The copies in the Society's hands are sufficient to show that the rock contains in substance a great portion of the last three edicts of the Girnar inscription, but they are too imperfect to be legible generally, though singularly enough, it was this part of the inscription which furnished me with the word Devanampiya, and led to its identification. From this illegibility one line, containing the names of the five Western Kings must be fortunately excepted, which Mr. Masson copied with especial care, and even took off a cloth impression of a small portion, in spite of the difficulties presented by the position of the rock. A fac-simile of this piece, reduced to one-quarter of its original surface, is given in a corner of the lithograph.

"The copy of the back of the rock, as made by Mr. Masson, is given in the second plate, and at the foot of the plate is added a transcript of the above-mentioned portion relating to the Western Kings, made by a native in the service of M. Court, and sent to Professor Lassen, who has favoured the Society with it. This transcript appears to have embraced the whole of the rock; and, at first sight, would appear to have been carefully made, but on examination, it is found to be very imperfect. Many portions have been turned upside down; and it has been found impossible to trace the connection generally with what we have from Mr. Masson. The probability is, that the native copied

the inscription on detached pieces of paper, which were afterwards misplaced."

In order to exhibit with as much distinctness as possible the language of the inscriptions, I have written the whole of them with Mr. Norris's aid in Roman characters, agreeably to the system devised by Sir William Jones and followed by the Royal Asiatic Society, with a few unimportant exceptions; and I have placed the several inscriptions, so written, in parallel lines, in order to bring the words of each in juxta-position as far as was practicable. They accordingly form four lines. The upper line represents Mr. J. Prinsep's original readings, as published in the *Journal of the Asiatic Society of Bengal*, vol. VI., p. 228, and above the line, in a smaller character, are inserted his subsequent corrections, as given in a copy of the *Journal*, corrected by himself, and placed at Mr. Norris's disposal by his brother Mr. H. T. Prinsep. Small numerals refer to the lines of our own lithographed copy. This line I have designated G a. The second line is the representation of the copy now lithographed, and which I have generally referred to as Mr. Westergaard's copy, as he has the larger share in it. This is marked G b. The third line marked D repeats the Dhauli inscription as given by Mr. Prinsep. We have not yet been fortunate enough to have had a second and revised transcript, although it is very desirable. The lower line is marked K, as being rendered into Roman letters from the lithographed copy of the Kapur di Giri inscription. The small figures here also refer to the lines of the original. Where blanks occur in either of the inscriptions they are denoted by asterisks: where words are wanting for the collation although there is no blank in the inscription, a line supplies their place. By this arrangement, it is hoped that a ready reference may be made to the lithographed originals; and that the critical remarks which follow each separate tablet may be conveniently compared with the passages to which they relate.

TABLET I.

G a	¹ Iyam	dhammalipi	devánam	piyena	² Piyadasiná	Ráñá
G b	Iyam	dhammalipí	devánam	piyena	Piyadasiná	Ráñá
D	* *	ghi savatasi	devánam	piya *	* * * *	* *
K	¹ Aya	dhamalipi	devanam	priyasa	* * * *	Rajo

G a lekhápitá. Idha na . kanⁱ'chi jivam árabhítá^{paju} pujá
 G b lekhápitá. Idha na kanchi jivam árabhittá paju
 D * * * * * * * * * * nam álabhitu pajapa
 K likhapi * idam loke cha * jivanam ara * * * *

G a hitaya^m 'na cha samája^e kata^ovye bahu^{kam} hi dosam repidasam
 G b hitavyam na cha samája^e kata^ovyo bahukam hi dosam
 D * * * * * * * * * * * * * * * * * *
 K * * cha * pi * sama * * * * * * * * *

G a samájamhi padati devánam piya^o Piyadasi Rájá
 G b samájamhi pasati devánam piyo Piyadasi Rájá
 D * * * * * * * * * * * * * * * * * *
 K * * * * * * * * * * * * * * * * * *

G a asti^a pitu ekachá samája sádhumatá devánam 'piyasa
 G b asti pitu ekachá samája sádhumatá devánam piyasa
 D * * * * * * bha palápá sádhumatá devánam piyasa
 K asti^a pi * katia — samayasa samato — devanam priyasa

G a Piyadasino ráño pura mahánase thu he^{pe} devánam piyasa
 G b Piyadasino ráño purá mahánase jamá devánam piyasa
 D Piyadasine * * * * * * * * * * * * * *
 K Priyadasisa rajo para mahanasasa — devanam priyasa

G a Piyadasino ráño anudivasam ba'húni páña satasahasáni
 G b Piyadasino ráño anudivasam bahúni pána satasahasáni
 D * * * * * * * * * * * * * * pána sata * *
 K Priyadasisa rajo anudivasa bahuni pana hada * asani

G a árabhisu supátháyaⁱ sa^{se} aja yadá ayam dhamalipi
 G b árabhisu súpátháya sa aja yadá ayam dhammalipi
 D *labhiyisu supatháya * * * * * * dá * * dhammalipi
 K * * * * * * * * * * * * * * dhamalipi

G a likhitáti eva pána árabhísa supátháyaⁱ dwámará^{o e}
 G b likhitáti eva pána árabhire súpátháya dwamerá
 D likhitáti * * * * * labhiya * * * * * * * *
 K likhita* anatam yato praña hiñoti * * jata kati

G a	eko	mato	so	pi	^u ra magána	^o dhuvá	^{va} eka	ⁱ pátí	páná
G b	eko	mato	so	pi	magona	dhuvo	ece	pátí	páná
D	*	*	*	*	*	*	*	sini	pánáni
K	sti	mago	na	so	pi	mago	na	dhavalasa	pu panam

G a	—	pachhá	ná	arabhisande.
G b	—	pachhá	na	árabhisande.
D	—	pachhá	na	álabhiyisata.
K	trayi	pacha	na	arabhisanti.

THE first portion of the inscription on the rock at Kapur di Giri has suffered materially from the effects of time and exposure, but enough remains distinct to establish its identity, in all essential points, with the inscriptions at Girnar and Dhauli.

It opens with a similar phrase, although differing in the first word, using the pronoun, *aya*,—or more properly, *ayam*,—instead of, *iyam*, “this.” The nasal terminations are generally omitted in this inscription; an omission referable, perhaps, to carelessness in the sculpture or to the subsequent effacement of the simple and possibly superficial mark of the nasal. *Ayam*, as well as, *iyam*, is the Sanskrit pronoun; the former the masculine, the latter the feminine. But in Pali, *ayam*, is of both genders, and the Girnar inscription, therefore, is Sanskrit rather than Pali in its use of, *iyam*; as Prinsep observes, *ayam*, is also used in place of, *iyam*, in some of the other Girnar tablets, —*ayam dhammalipi*, this writing of the law is the same in both inscriptions, only that we have, *dhama*, instead of, *dhamma*; the nasal mark of the first, *m*, being either omitted or obliterated.

The title of the prince, *devanam priyasa*, in the genitive case, next occurs, corresponding, except in the case, with the *devānam piyena*, of Girnar. We have, however, to notice one or two orthographical peculiarities: we have first, *devanam*, not *devānam*—the short penultimate vowel instead of a long one; *devānam* for *devānám*, is a Pali divergence from Sanskrit—but the short quantity of the first, *a*, is peculiar to Kapur di Giri. It is not, however, confined to this case, for throughout the inscriptions a long, *á*, like the short, is very seldom written. It may be doubted if any distinction is observable between the other short and long vowels, although there is an appearance occasionally of a long, *í*. The other peculiarity is the more correct Sanskrit form of *Priya* instead of the Pali, *Piya*; there is a line at the foot of the, *p*, which cannot well be anything else than the conjunct, *r*. It is the more remarkable, because Prakrit and Pali are very chary of compound consonants, and because it corrobo-

rates the co-existence of the radical form, *priya*, and its corruption, *piya*; of the Sanskrit original, and its dialectic derivative. We have also to remark the use of the genitive instead of the instrumental, but this is compatible with the rules of Pali syntax. The name of the prince is omitted, but we have his designation, *rajo*, of the king, followed by the participle, *likhapita*, caused to be written. This edict has been caused to be written of (by) the beloved of the gods the Raja (*Priyadasi*?).

The following phrase in the Girnar inscription presents several difficulties which the Kapur di Giri copy does not enable us to clear up, although it may suggest a conjecture; but it is here very indistinct and imperfect. Prinsep has, *idha na kanchi jivam árabhitá*, the latter in Mr. Westgaard's copy is, *árabhittá*. Our reading seems to be, *idam loke cha (na?) jivanam ara*, the rest wanting. *Idam*, can scarcely be connected with *loke*, or we might render it, in this world, but, *idam*, is the nominative neuter, and, *loke*, the locative — an inadmissible concord, but the Kapur di Giri sculptors do not appear to have suffered grammatical niceties to stand in their way. *Jivanam*, may be intended for the genitive plural, a reading which concurs with that apparently of the Dhauli inscription; in either case we may admit that, living creature, or, of living creatures, is meant. It is unlucky that so much of the corresponding word, *árabhitá*, should be effaced, for it is a very awkward word to be disposed of; the sense is doubtful; yet upon its right interpretation depends the meaning of the whole inscription. I am not at all satisfied that it has been rightly rendered, but it may be possibly connected with the sense of putting to death, and Mr. Prinsep so translates it. He treats the word as the abstract noun, "the putting to death of living beings is not to be done." But according to his reading, *jivam*, the nominative or accusative singular, cannot be in concordance with another abstract noun in the nominative case, and so far, *jivanam*, for, *jivánam*, were preferable, as it occurs at Kapur di Giri: *árabhittá*, with a double, *t*, however, is not the Pali form of, *árabhitá* — it might, if the final were short, represent, *arabhitwam* — the neuter abstract, or it may be thought intended for the past indeclinable participle, *arabhitwá*, although that were an irregular formation, since the Prakrit and Pali adhere to the Sanskrit type, and would be correctly, *arabhya*, or, *arabh-i-a*. Admitting it, however, to be the abstract substantive, and that the expression implies, the putting to death of living beings, what follows? Prinsep says, is not to be done either for the benefit of the *puja*, or in convivial meetings, *puja hitáya na cha samáje katavye*. But this can scarcely be admitted; the corrected copy reads, *paju hitayam na cha samáje katavyo*. Mr. Westergaard's copy has, *hitavyam*.

We have no help from the Kapur di Giri table, although one or two fragments correspond. It might be thought that, *hitavyam*, is connected with, *árabhittá*, meaning, slaughter is to be abandoned. But the neuter participle were inconsistently in concord with a feminine noun. This has the advantage, however, of separating, *katavyo*, also masculine, from, *árabhittá*, and restricting it to, *samája*, in which case we have two sentences complete; "sacrifice for worship (?) is to be discontinued, neither is any public meeting to be made." *Samája*, does not necessarily signify a convivial assembly, but such an interpretation is allowable. *Katavyo*, it may be observed, is neither Sanskrit nor Pali; in the former it would be *kartavya*, in the latter, *katabbo*.

Much cruelty of this nature occurs in such assemblies, is Mr. Prinsep's translation of the following words, as he at first read them, *repi dasam samájamhi padati*, but his copy was erroneous, and he afterwards corrected it to *bahukam hi dosam samájamhi pasati*. Mr. Westergaard has the same corrected reading, *bahukam hi dosam samájamhi pasati*, which, with the governing words that follow *devánam piya piyadasí rájá*, make sense.—For the beloved of the gods king Piyadasí sees much that is blameable in convivial assemblies. Whether his objections were political or religious may be doubted, but, in either case, his interference with "cakes and ale," is not very creditable to the good fellowship of Raja Piyadasí.

Mr. Prinsep carries the government of the nominative, Piyadasí Raja, to the following words, reading them, *asti pitu*, and explaining the passage, Piyadasí, &c., is as it were a father (to his people). But he was not satisfied with the interpretation, and it is most probably incorrect. We have the corrected reading of Westergaard, *asti pi tu*; the Kapur di Giri tablet has, *asti pi*, so far confirming either. The sentence probably begins with the verb, and, *pi*, and, *tu*, are conjunctions; the first being usually employed in Prakrit instead of *api*, verily, indeed, and the sentence is, but indeed there is one assembly which is held respectable (in the estimation) of the Raja. Our inscription somewhat differs in the words following *asti pi*, having, *katía*, with a blank and, *samayasa samato devanam priyasa*, the two first words of the latter may mean, sameness of agreement, concurrence, assent, but it is difficult to assign any applicable meaning to *katia*, understanding it to be intended for the dialectical form of, *kritwá*, although the Pali would be *katwá*, or if, *ya*, be used, it is *kariya*. In place of Piyadasino which follows the analogy of the Sanskrit declension of nouns in, *i*, we have *Priyadaśisa*, the analogous genitive of nouns in, *a*. It is a variety admitted in Pali grammar. Mr. Prinsep's version of the whole passage makes the sense something very

different, depending upon his reading *ekáchá*, uniformity of worship, but this is very questionable. Mr. Westergaard's copy has apparently, *eka*, not, *eká*, and if the Sanskrit, *archá*, were intended in the second part of the compound, we ought to have, *archa*, or, *ach-chá*; the word itself also would not be appropriately used for worship, in general: the more probable reading is, *eka cha*, or perhaps, *eka vá*, connected naturally enough in the manner proposed above with what precedes and what follows; but there is, however, one social meeting, &c.

The assembly which the Raja patronises appears to be that of his own kitchen—as if he wished to monopolize the good cheer of his dominions; or as Prinsep renders the passage, Formerly in the great refectory and temple of the heaven-beloved, &c.,—reading it, *pura mahánase thuhe devánam piyasa*,—he admits however that the meaning of, *thuhe*, is doubtful. Mr. Westergaard has, *jamá*, in place of, *thuhe*, an equally doubtful term. The Kapur di Giri inscription has no equivalent of either, and yet has no blank—instead of, *mahánase*, it has, *mahanasasa*, and, *para*, for, *pura*,—giving a rather preferable sense—or the sanction of the beloved of the gods, to the great or supreme kitchen of the same; but what happens there? a transaction very incompatible with the sovereign's previous interdiction, for there every day many living beings, hundreds of thousands are slaughtered. The Kapur di Giri inscription agrees with the reading of Girnar, until we come to the verb, when there is a blank, which is unlucky, for that which looks like the verb, *árabhisu*, wants confirmation. However, it is possibly only a slight error for, *arabhisu*, the nasal mark having disappeared; this is the form of the indefinite past tense, and as there is no difference of form in this tense in the active and passive voice, we are at liberty to ascribe to it the force of the latter, and translate it, have been killed; all the inscriptions have, *páná*, for *práná*, life, living thing, and the plural neuter nominative ends in, *á* as well as in, *áni*. We have no word corresponding to *supátháya*, which follows, *árabhisu*, in the Girnar tablet, rendered by Mr Prinsep, for the sake of food, but the Sanskrit, *súpa*, is literally soup, not food, and we can scarcely suppose that hundreds of thousands of living beings were boiled down for soup in king Pi-yadasi's kitchen. The first syllable in the first copy of the Girnar inscription is short, but it appears to be long in Mr. Westergaard's copy. We cannot, however suppose, *súpa*, to be intended, and it may be allowable to consider it as the particle, *su*, good, while, *patháya*, is the dative case of a noun, *patha*, way, so that the compound may imply, for a good or righteous purpose.

The Girnar inscription proceeds, to-day when this writing of the law, or edict is promulgated; the Kapur di Giri tablet concurs in

the reading of, *dhamalipi likhita*, with a small blank, which may have been filled up by, *ti*, a syllable rather perplexing, although unnoticed by Mr. Prinsep; it may be intended for the conventional sign of the end of a sentence, *iti*, but the compound should in that case be, *likhite ti*, even in Pali.

The following passages differ materially in the two inscriptions, and it is scarcely safe to attempt an explanation of either. Mr. Prinsep renders the Girnar inscription, so even at this day, while this edict is under promulgation from the sacrifice of animals for the sake of food, some two are killed, or one is killed; which is by no means satisfactory. We might render the Girnar inscription, So, to-day, while this edict is promulgated, animals may be killed for proper purposes, taking the corrected form, *árabhire*, as the third person plural of the potential mood, which in one form is, *árabheran*, but what is meant by, *dwamerá*, or, *dwonerá*, cannot be satisfactorily conjectured; it certainly cannot mean, two are killed. The reading of the Kapur di Giri tablet is quite different, and is equally unintelligible, although, *praña hinote*, may mean, who injures human beings.

Of the following words, *eko mato so pi*, Mr. Prinsep considers that the two first may mean, one is killed, in connection with, *dwamara*, which he would render, *dwan mritau*, two are killed,—admitting, however, that the whole is unintelligible. In the late corrections of the Girnar inscription by Captain Jacob, we have a modification of, *dwa*, but it looks like, *dth*, and is unsatisfactory,—a more serviceable correction however follows; instead of, *eko mato*, we have, *eko mago*, one way or road, *eka márga*, which connects very well with what follows, *so pi mago na dhuvo*, but that road or way is not established, not permanent, or, *dhruva*. The Kapur di Giri reading confirms this, and apparently supplies the verb, *sti*, for, *asti*; there is (but one right) way, *sti mago*; it inserts here the negative, *na*, as well as in the following, *so pi mago na*, but this is probably a blunder. For, *mago na dhuvo*, Mr. Prinsep's first reading was, *rama gána dhuvá*, which he rendered, the joyful chorus resounds again and again, supposing that the two first words might be intended for, *ramya gána*, although he acknowledged that this was doubtful. In fact there was no, *ra*, in the inscription, and the rest is, *mago na*, as above.

Again the Girnar tablet gave as first read, *eka páti pána*, which Mr. Prinsep renders, a single animal, but, *eka*, has been changed to, *ete*, these,—and we therefore require something to fill up the sense. *Ete pána*, might be rendered, *ete prána*, these living beings, but then what becomes of *páti*? It would seem preferable

therefore to combine the two words and consider, páti páhá, as representing the Sanskrit, pratipanná, produced, promulgated, completing an intelligible passage thus,—there is but one right way, and as that way is not fixed, these presents are promulgated to establish it; hereafter they (living beings) shall not be put to death; all the copies of the inscriptions agreeing, or very nearly, in the concluding words, pachhá na arabhisande. In what immediately precedes, the Kapur di Giri inscription, although entire, is doubtful, and probably corrupt.

Putting together the result of these observations, the translation proposed, subject, be it always remembered, to correction in every phrase, will be—

Proposed Translation.

"This is the edict of the beloved of the gods, Raja Priyadasi; the putting to death of animals is to be entirely discontinued, and no convivial meeting is to be held, for the beloved of the gods, the Raja Priyadasi, remarks many faults in such assemblies. There is but one assembly, indeed, which is approved of by the Raja Priyadasi, the beloved of the gods, which is that of the great kitchen of Raja Priyadasi, the beloved of the gods; every day hundreds of thousands of animals have been there slaughtered for virtuous purposes, but now although this pious edict is proclaimed that animals may be killed for good purposes, and such is the practice, yet as the practice is not determined, these presents are proclaimed that hereafter they shall not be killed.

Mr. Prinsep's Translation.

"The following edict of religion is promulgated by the heaven-beloved king PIYADASI. 'In this place the putting to death of anything whatever that hath life, either for the benefit of the puja, or in convivial meetings, shall not be done. Much cruelty of this nature occurs in such assemblies. The heaven-beloved king PIYADASI is (as it were) a father (to his people). Uniformity of worship is wise and proper for the congregation of the heaven-beloved PIYADASI rája. '

"Formerly in the great refectory and temple of the heaven-beloved king PIYADASI, daily were many hundred thousand animals sacrificed for the sake of meat food. So even at this day while this religious edict is under promulgation, from the sacrifice of animals for the sake of food, some two are killed, or one is killed:—but now the joyful chorus resounds again and again—that from henceforward not a single animal shall be put to death.' "

TABLET II.

G a	^a Savata vijitemhi devánam piyasa Piyadasino raño
G b	Savata vijitamhi devánam piyasa Piyadasino raño
D	*avata vimitamsi devánam piyasa Piyadasine * *
K	Savatam vijite devanam priyasa Priyadaśisa raja

G a	ⁱ evamapá ^{ch} pavantesu yathá Choḍa ^á Pída Satiyaputo
G b	evamapipávantesu yathá Choḍá Pádá Satiyaputo
D	* * * * * * * * * * * * * * * *
K	* * * * * * * * * * yi 'Palaya Satiya putra

G a	Ketaleputo, a Tamba ^a paññi Antiyako yona rája ye
G b	Ketalaputá a Tambapaní Antiyako yona rája ye
D	* * * * * * * * * * tiyoke náma yona lája yá
K	cha Keralamputra Tambapani Antiyoka ne yona raja ye

G a	vá pi — tasa Antiyakasa ^{asani} sámino 'rájano, savata
G b	vá pi — tasa Antiyakasá sámípan rájano savata
D	vá * — * sa Antiyokasa sámantá lájane savata
K	cha araña tasa Antiyokasa samata rajaya sakato

G a	devánam piyasa Piyadasino raño dwe ⁱ chikíchhá katá
G b	devánam piyasa Piyadasino raño dwe chikíchha katá
D	devánam piyasa Piyadasine la * * * * *
K	devanam ,priyasa Priyadaśisa raño kisa kabha * *

G a	ⁱ manusa chikíchhá cha pasu ⁱ chikíchhá cha ^{ad} osudháni
G b	manusa chikíchhá cha pasu chikíchhá cha osudháni
D	* * * * * ká cha pa * * * sa cha * dháni
K	* * * * * * * * * * * * * * *

G a	cha yáni manusopagáni cha ^a pasopagáni cha yata
G b	cha yáni manusopagáni cha pasopagáni cha yata
D	* áni muniso * * ni * pasu-opagánani cha ata
K	* ^o * janaśopakani cha paśopakani cha yata

G a	yata násti savata párápitáni cha ropápitáni cha 'múláni
G b	yata násti savatá hárápitáni cha ropápitáni cha múláni
D	* * natthi sa — 'pálápita — lopapita cha mú * *
K	yatra nasti savatra harapita-_____

G a	cha	phaláni	cha	yata	yata	násti	savata	hárápítáni
G b	cha	phaláni	cha	yata	yata	násti	savata	hárápítáni
D	*	*	*	*	*	*	*	* vata
K								
G a	cha	ropápítáni	cha	*pathesu	kúpa	cha	khanápítá	
G b	cha	ropápítáni	cha	panthesú	kúpa	cha	khanápítá	
D	cha	lopápítá	cha	ma * *	ulapánáni	—	khanápítáni	
K			vata	cha	kupa	cha	khanapita	
G a	vachhá	cha	ropapitá	paribhogáya	pasu	manusánam		
G b	vachhá	cha	ropápítá	paribhogáya	pasu	manusánam		
D	lukhani	cha	lopápítáni	patibhogaya	pa * * *	ánam		
K				prutibhogaye	paśu	manuśanam		

The portion of the Kapur di Giri inscription, which corresponds with the second Tablet of Girnar and Dhauli, is less imperfect than that which answers to the first Tablet, and in the few blanks which occur, it admits of being conjecturally completed without any great violence.

There are, however, several omissions as compared with the Girnar sculpture, which are apparently intentional, constituting a variety in the language, though not in the general purport of the inscriptions. The inscriptions correspond also in the chief point of interest, the mention of Antiochus, the Yona Raja.

The inscription commences with the phrase, Savata vijite, followed by a short blank, which may be filled up without much risk of error by the syllable, mhi, of the Girnar tablet; everywhere in the conquered countries, which is followed by the usual designation of the beloved of the gods Piyadasi, the genitive being as before Priyadaśisa: the word, countries, it may be presumed, is understood in all the inscriptions.

We have no equivalent for what follows, which is read by Mr. Prinsep, evamapápavantesu. In Westergaard's copy it might be read, mahi páchantesu, but it is perhaps only, evam api pachantesu, (for pratyanteshu) also even in the bordering countries, not as Prinsep proposes, as well as in the parts occupied by the faithful. Nor have we any equivalent for Chóda, conjectured by Prinsep to be that portion of the south of India, which is known as Chola, or Cholamandala, whence our Coromandel.

Instead of Pída, which requires to be corrected to Pádá, we have Palaya, and then Satiya putra cha Keralamputra Tambapani, in near approach to Satiya puto Ketalaputá and Tambapani, words which have

been thought intended to designate places in the south of India, but of which the two first, Palaya and Satiya-puto, are new and unknown. Kerala is no doubt a name of Malabar, as Chola is of the opposite coast, but we also find both words in combination with others designating countries or people in the north-west, as "Kamboja, Yavana, Chola, Murala, Kerala, Saka." Gana Páthra, referring to a Sūtra of Pánini. 4. 1. 175. Tambapani it has been proposed to identify with Tāmrāparni or Ceylon, but further research may also remove that to the north. The same authority giving the Gaṇa or list of words indicated in the Sutra, 5. 1. 116, explains them to signify tribes of fighting men, and specifies among them Savitri-putra, which offers some analogy to the Satiyo putra of the inscription. It is much more likely that countries in the north-west than in the extreme south of India are intended.

We next come to the important passage in which a Greek name and designation occur. Both the Girnar copies read, Antiyako yona rája; the Kapur di Giri has, Antiyokane yona raja, but the two last letters, ne, are rather doubtful. It should perhaps be, Antiyoke nama, as at Dhauli, where we have, tiyoke nama yona lája. The use of the nominative case, however, offers a syntactical perplexity, for there is not any verb through which to connect Antiochus with the rest of the sentence, and it seems unusual to associate the name of an individual with those of places. Mr. Prinsep supplies the defect with, the dominions of Antiochus the Greek, but we have no term for, the dominions, nor is the noun in the genitive case, as it is in what follows. In this the Kapur di Giri inscription nearly agrees with that of Girnar, and it may be read, ye cha a raña tasa Antiyokasa samáta rajaya sakato devanam priyasa, &c., that of Girnar being, ye vá pi tasa Antiyakasa sámipam rájano savata. Either may be rendered, and those princes who are near to Antiochus everywhere; although rajaya is an unusual form of the plural of raja, being neither Sanskrit nor Pali. The object of prefixing, a, to rajna in the word araña being equivalent to no king, is not very intelligible, and it can scarcely be doubted, that, sakato, should be, savata, as found both at Girnar and Dhauli. It seems likely that there may be some inaccuracies in this part, either in the original or the copy. But admitting a concurrent reading, we still want a connecting word, and it is not specified what these neighbours or dependants of Antiochus are to do. We may presume that they are expected to attend to the object of the edict, or they may be comprehended in the list of the, savata vijíte, the conquered. The name of, Devanam priya, follows, as in the other inscriptions, but we then have, kisa

kabha, a very singular expression. It may be intended, however, for the phrase of Girnar, *chikíchha katá*, omitting the first syllable. It is unluckily followed by a chasm in the inscription which leaves it uncertain what duty or office was enjoined. The Girnar table has in this place the expression which Mr. Prinsep renders, every where Piyadasi's double system of medical aid is established—both medical aid for men and medical aid for animals, together with medicaments of all sorts which are suitable for men and for animals. There may have been something of the kind in the Kapur di Giri inscription, as it resumes with, *janaśopakani cha paśopakani cha*, beneficial for man and animals; and proceeds in the same terms as the Girnar and Dhauli inscriptions, wherever there is not (such) every where (they have been—); the sense of the following word, *hárápítáni*, is not clear, but it is the corrected reading of the Girnar inscription also. The first reading was *parápítáni*, as if for *práptáni*, obtained, provided; *hárápítáni* may possibly be so explained, or may signify, taken, conveyed; but the term is of an unusual form and doubtful purport, and would more legitimately denote, removed, taken away. The other term *ropápítáni*, caused to be planted, has no representative in the Kapur di Giri rock; but admitting its correct interpretation, it indicates that medicaments cannot be meant by *osadháni*. It is not in fact the Pali form of, *aushadha*, a medicament, but, *oshadhi*, a deciduous plant, which might be medicinal or not, or which might yield an article of vegetable diet, as for instance any of the edible grains, in which sense it is probably here employed.

There is no defect in the part of the Kapur di Giri inscription which immediately follows, but it omits the whole passage found in the Girnar tablet, which Mr. Prinsep has translated,¹ (they) are to be planted, both root-drugs and herbs, (more correctly roots and fruits), wheresoever there is not, in all such places they shall be deposited and planted. We have nothing of this at Kapur di Giri. The inscription proceeds with, *vata cha*, of which the first may be a mutilation of, *savata*, everywhere, and then goes on to the close, to the purport of the Girnar inscription, but abridges it, stating in fact alone, that wells have been dug for the respective use of men and animals; omitting all mention of trees having been planted. The term for well is, *kúpa*, the regular Sanskrit word as it occurs at Girnar; the last term is, *prati-bhogaya*, which is confirmed by the Dhauli inscription, which gives the Prakrit *pati*, in place of the Sanskrit *prati*. At Girnar, both copies read, *paribhogáya*, complete use, but, *prati*, is the more germane to the sense.

The provision of vegetables—the measures to secure a supply of

roots and fruits—the planting of trees, and the digging of wells for the use, or literally the respective enjoyment (*pratibhoga*) of men and beasts, look more like arrangements intended to facilitate travelling than to cure sickness, and it may be doubted if the Girnar document contemplates any such design. The term, *chikichha*, is said by Mr. Prinsep to be the Pali form of, *chikitsā*, the application of remedies, but this is questionable. It would rather be, *chikichha*, with a short, not a long *i*; but in fact, the Pali form as it appears in vocabularies is, *tikichhā* or *tikichichhā*¹. The word is more probably the Prakrit form of, *chikīrsha*, the wish or will to do; and the edict, in fact announces that it has been the two-fold intention of the Raja to provide, not physic, but food, water, and shade for animals and men when traversing his own territories, or those of his Greek neighbour. In this view of the question, we may translate the more entire Girnar inscription to the following effect, inclosing those paragraphs in brackets which are not found in the Kapur di Giri inscription.

Proposed Translation.

In all the subjugated (territories) of the King Priyadasi, the beloved of the gods, and also in the bordering countries, as (*Chóda*), *Palaya*, (or *Paraya*), *Satyaputra*, *Keralaputra*, *Tambapani*, (it is proclaimed), and *Antiochus* by name, the *Yona* (or *Yavana*) Raja, and those princes who are near to, (or allied with) that monarch, universally (are apprised) that (two designs have been cherished by Priyadasi: one design) regarding men, and one relating to animals; and whatever herbs are useful to men or useful to animals, wherever there are none, such have been everywhere caused to be conveyed and planted, (and roots and fruits wherever there are none,

Mr. Prinsep's Translation.

"Everywhere within the conquered province of *rāja PIYADASI* the beloved of the Gods, as well as in the parts occupied by the faithful, such as *Chola*, *Pída*, *Satīyaputra*, and *Ketalaputra*, even as far as *Tambapanní* (Ceylon); and moreover within the dominions of *ANTIOCHUS*, the Greek, (of which *ANTIOCHUS*'s generals are the rulers,)—everywhere the heaven-beloved *rāja PÍYADASI*'s double system of medical aid is established;—both medical aid for men, and medical aid for animals; together with the medicaments of all sorts, which are suitable for men, and suitable for animals. And wherever there is not (such provision)—in all such places they

¹ See Clough's Vocab, p. 43, also a manuscript alphabetical Pali vocabulary, Bodleian Library.

such have been everywhere conveyed and planted; and on the roads wells have been caused to be dug, (and trees have been planted) for the respective enjoyment of animals and men.

are to be prepared, and to be planted: both root-drugs and herbs, wheresoever there is not (a provision of them) in all such places shall they be deposited and planted."

"And in the public highways wells are to be dug, and trees to be planted, for the accommodation of men and animals."

TABLET III.

G a	Devánampiya	Piyadasi	rájá	evam	áha	dwádasa	vasá
G b	Devánampiyo	Piyadási	rāja	evam	áha	dwádasa	vásá
D	Devánampiye	Piyadasi	lāja	hevam	áhá	duwádasa	vasá
K	Devanampriyo	Priyadaśi	rāñña	—	ahati	bavaya	vasha

G a	bhisitena	mayá	idam	añapitam	² savata	vijite	mama
G b	bhisitena	maya	idam	añapitam	savata	vijite	mama
D	bhisitena	me	iyam	ána [*] tam	* * *	* * te	sá me
K	* * *	*	* * *	* * *	* * *	* vijite	—

G a	yutá	cha	rajuke	cha	pádesake	cha	panchasu	panchasu
G b	yutá	cha	rájúke	cha	padesike	cha	panchasu	panchasu
D	yuga	*	* * *	*	* * * *	*	pa [*] chasu	panchasu
K	yota	—	rajaki	—	padeśi	va	pa * sha	pachashu

G a	vásesu	anusá [*] yinam	siyátu	etáyeva	atháya
G b	vásesu	anusányinu	niyáta	etáyeva	atháya
D	vascsu	anusayánam	nikhamávú	athá	annayepi
K	vasheshu	anusayanam	nikhamatu	eti	sato

G a	—	imáya	dhammánusanetáya	yathá	apo'ya	sá
G b	—	imáya	dhammánusastiya	yatha	achoya	si
D	kammane	hevam	imáye	dhamá	anusayasá	—
K	kavayo	—	imisa	dhamanuśrastaye	sa	anaye pi

G a	kammāya	sadhu	mātari	cha	pitari	cha	^{stāsi} susūsā	^ā mitā
G b	kammāya	sādhu	mātari	cha	pitari	cha	susūsā	mitā
D	————	— u	mātā	—	pitā	—	sususa	* *
K	kramaye	sadhu	mata	—	pitushu	—	suśrushra	mitra

G a	^{sanstuta} sa suta	ñatīna	bambhāna	*sanañānam	sādhu	dānam
G b	sansūta	ñātīnam	bambhāno	samañānam	sādhu	dānam
D	* * *	natāsu	cha bambhana	sumanchi	sādhu	dāne
K	suta*	na	* * * * *	* * * *		

G a	pāñānam	sādhu	anārambho	apavyayatā	^{il} apabhindatā
G b	pāñānam	sādhu	anārambho	apavyayatā	apabhindatā
D	jivesu	anālabha	sādha	apaviyati	apabhandatā
K	* * *	* *	* * *	* apavayata	apabhidata

G a	sādhu	*parisāpi	yuto	añapayisati	gañanāyam
G b	sādhu	parisāpi	yuto	añapayisati	gañanāyam
D	sadhu	palisāpi	cha	* * tiyatani	ānapeyi ta
K	sadhu	parisapa	yutra ni	* * na*	chata
					ñapeśanti

G a	hetu	to	cha	vyanjane	to	cha
G b	hetu	to	cha	vyanjana	to	cha
D	* tu	to	cha	vā	* *	
K	hatusta	cha	vañāna	to	cha	

The opening of the inscription corresponds with that of Girnar, only substituting ahati, the primitive, although obsolete, third pers. present tense for, āha, the King Priyadasi, &c., says. In place of dwādasa, twelve, and vāsā, year, the inscription has bavaya vasha, but the first must be wrong; the second is no doubt correct, corresponding with the vāsā, for varsha, year, of the Girnar and Dhauli tablets, although that should properly be, vassā, with a double s, the noun being in the ablative case, from the twelfth year. A long chasm ensues, but the defective passage probably corresponded with that at Girnar, to which rendering no reasonable objection applies; and it is as Mr. Prinsep renders it, this is commanded by me, having been consecrated (or enthroned) twelve years.

The word, vijite, in the conquered (country) corresponds with the Girnar tablet; mama, miné, is omitted without any blank: the omission does not affect the sense. The following sentence nearly corresponds

with that at Girnar, but we have, yota for yote, and rajaki padesiva, for rajuke cha padesake cha. It is probably somewhat inaccurate in this place. Mr. Westergaard corrects, yote to yutá, but the Kapur di Giri inscription confirms the former. Mr. Prinsep identifies, yote with yukte, and interprets it, among the faithful, a meaning that cannot be admitted; it is more likely to be the epithet of, rajuke, especial or own subjects, as opposed to, pradesaka, a foreigner; for panchasu pauchasu, we have pa^{*}sha pachashu, no doubt the same reading.

The two following words confirm the reading of the Dhauli inscription, and this is of importance, for they admit of a plausible translation, which cannot be said of the Girnar inscription, either as originally deciphered or as corrected from, anusayinam siyatu, to anusáyinū niyáta, neither of which is intelligible. The Kapur di Giri reading is, anusayanam nikhamatu, "let injunctions be endured or obeyed;" the second word being the Pali form of, nikshamyatu, from kshama, "to bear." As the passive verb, it should properly be, nikshamyatám, but this may be the error of the writer. Anusayanam, has for one sense repentance, but it scarcely seems capable of such a meaning in this place. The following words differ materially from those of the other inscriptions; in some instances they cannot be correct, as kavayo, in place of the kammane, of Dhauli, but all three inscriptions deviate so much from any thing like grammar, that it is difficult to make sense of the passage; etáye, might be the third case of the feminine pronoun, etá, this; but, etáye, is not found in the Pali grammar; we can only however connect it with, atháya, for artháya, fourth case of, artha, masculine noun, object, meaning; at Kapur di Giri we have, eti sato, or perhaps it should be, atisasa, for, atisayasya, of much, and then, imisa, of this, dharmanusrastaye, falling off from piety, while in the others it is read, dhammánusanstáya, for the establishment of piety. In the Kapur di Giri inscription, again, we have the, sa anaye pi kramaye, that is, through this series, in place of, yathá apoya sá kammáya, corrected to, achoya si kammáya, or possibly, aváya si kammáya; the readings are all untranslatable; all the inscriptions have, sadhu, it is good. They all concur sufficiently in what follows, or as it runs in the Kapur di Giri tablet, matapitushu suśrushra, obedience to parents, mitrasutana, (love of) friends and sons. The inscription then is interrupted and omits much that is found at Girnar, translated by Prinsep, good and proper is service to Brahmans and Sramans; excellent is charity: he omits the next clause, good is non-injury to living beings; and adds, prodigality and malicious slander are

not good. We have in the Kapur di Giri inscription the last words which he has thus rendered as, *apavayata*, and *apabbidata*, for *apavyayatá*, and *apabbindatá*; but they should be preferably rendered in the negative sense, or freedom from extravagance, and absence of censoriousness are good; which obviates the necessity of the violent correction Prinsep was obliged to make in arbitrarily prefixing a negative to, *sadhu*. The Kapur di Giri inscription confirms the rest; it is, *sadhu*, not, *asádhu*, in all.

The remainder of the inscription corresponds nearly with that of Girnar, but does not assist us to make out a probable interpretation; *parisapi yuto*, or, *parisapayutra*, cannot mean, leader of the congregation. It is more probably intended for, *parisarpa yukta*, fit or appropriate progress, followed by the verb in the causal passive, shall be commanded in the enumeration, (at the periods enjoined?) for *gañaná*, has such meaning only, and not the sense of, *gana*, a number or assembly: the word *gañaná* does not occur in our inscription; as to that at Dhauli it is evidently too imperfect to be of any help in this place; *hatusta cha vañana na*, are near enough to, *hetuto cha vyanjanato cha*, although they are both suspicious forms: *vyanjaña*, in Pali or Pankrit should be, *vinjana*.

Subject to considerable doubt, we may propose the following translation of Inscription III.

Proposed Translation.

King Priyadasi says, This was ordered by me when I had been twelve years inaugurated in the conquered country, and among my own subjects as well as strangers, that every five years' expiation should be undergone with this object, for the enforcement of such moral obligations as were declared by me to be good; such as duty to parents, (and protection of) friends, children, (relations, Brahmans and Sramans;) good is liberality, good is non-injury of living creatures, and abstinence from prodigality and slander are good. Continuance in this course,

Mr. Prinsep's Translation.

"Thus spake the heaven-beloved King PRIYADASI:—

"By me after the twelfth year of my anointment, this commandment is made! Everywhere in the conquered (provinces) among the faithful, whether (my own) subjects or foreigners, after every five years, let there be (a public) humiliation for this express object, yea, for the confirmation of virtue and for the suppression of disgraceful acts.

"Good and proper is dutiful service to mother and father;—towards friends and kinsfolks, towards Brahmans and Sramans

(the discharge of these duties) shall be commanded both by explanation and example.

excellent is charity :—prodigality and malicious slander are not good.

“All this the leader of the congregation shall inculcate to the assembly, with (appropriate) explanation and example.”

TABLET IV.

G a	¹ Atikátam	antaram	bahúni	vasasatáni	vadhítá	eva
G b	Atikátam	antaram	bahuni	vásasatáni	vadhítá	eva
D	Atikantam	antalam	bahúni	vasasatáni	vadhiteva	
K	Atikatam	antaram	bahuni	vashaśatani	vadhito	va

G a	pánárambho	vihinsá	cha	bhútánam	ñatisu	² asampatipatí
G b	panarámbha	vihinsá	cha	bhútánam	natisu	asampatipatí
D	pánálabbhe	vihinsá	cha	bhútánam	nátisu	asampatipati
K	pranarambho	vihisa	cha	bhutanam	ñatinu	asapatipati

G a	bamhāna	sāmañānam	asampatipatí	^t cha	⁴ aja	devānam
G b	bāhmana	samanānam	asampatipatí	ta	aja	devānam
D	samana	* * yesa	asampatipati	se	aja	devānam
K	śramañam	bramanam	sapatipati	tu	aja	devanam

G a	piyasa	Piyadasino	ráño	^{uena} ¹ dhammacharāganena
G b	piyasa	Piyadasino	raño	dhammacharañena
D	piyasa	Piyadasino	lajine	dhammachalanena
K	piya*		* * *	² dhamacharañena

G a	bherighoso	^{ho} api	dhammaghoso	vimana	dapañá	cha
G b	narighoso	aho	dhammaghoso	vimána	dasaná	cha
D	bhelighosam	api	dhammaghosam	vimána	dasanam	
K	bherigosha	aha	dhamagosha	vimanena	daśanena	

G a	^t hassi	dapañá	cha	⁴ agikhandáni	cha	añáni	—
G b	hastí	dasaná	cha	agikhandáni	cha	añáni	cha
D	hathíni	—	—	agakhandhāni	—	annāni	cha
K	nena	—	—	netikadhani	—	añani	cha

G a	divyáni	—	rúpáni	dasayi	pājanam	yárisa
G b	divyani	—	rupáni	dasayi	pujanam	yárisa
D	diviyáni		lúpánam	dasayitu	munisánam	ádise
K	divani	*tam	* pani	danásayitu	janasa	yadiśam

G a	bahú	hi	vasa	satehi	na	bhúta	puve	tárise	aja
G b	bahu	hi	vasa	satehi	na	bhúta	puve	tárise	aja
D'	bahú	—	vasa	satchi	no	lúta	puluvo	tádise	aja
K	bahu	hi	vasa	satehi	na	bhuta	purve	tadiśe	aja

G a	vađhitá	devánam	piyasa	Piyadasino	ráño	dhammánu-
G b	vađhite	devánam	piyasa	Piyadasino	raño	dhammánu-
D	vuđha	devánam	piyasa	Piyadasine	lájine	dhammanu-
K	vađhite	devanam	priyasa	Priyadaśisa	raño	dhamanu-

G a	sanstiyá	anáram ^o bho	pánánam	avihinsá	bhutánam
G b	sastiyá	anárambho	pánánam	avilisa	bhutánam
D	sathiyá	anachambho	pánánam	avihinsá	bhutánam
K	sanstaya	anaram * *	* nánam	avilisa	bhatana

G a	īátinam	sampatipatí	bámhaña	samañánam
G b	ñátinam	sampatipatí	bamhana	samanánam
D	ñatisu	sampatipati	samana	bábbhanesu
K	ñanasa		* * *	*sramañanam

G a	sampatipatí	mátari	pitari	ṛsusúsá	thairo	susúsá
G b	sampatipatí	mátari	pitari	susúsá	thairi	susúsá
D	sampatipati	máta	pitu	susúsám	va	susúsá
K	sapatipati	mata	pita	shu tu	ara	súśrusha

G a	esa	añe	cha	bahuvidhe	dhammacharaña
G b	esa	añe	cha	bahuvidhe	dhammacharañe
D	esa	anne	cha	bahuvidho	dhammachalane
K	esam	iña	cha	bahuvadham	dhamacharañam

G a	vađhita ^o	vadhayisati	cheva	devánam	piyo	*Piyadasi
G b	vađhite	vadhayisati	cheva	devánam	piyo	Piyadasi
D	vađhite	vadhayisati	cheva	devánam	piye	Piya * *
K	vađhitam	* vađhiśati	chayo	devanam	priyasa	Priyadaśisa

G a	rájá	dhammacharañam	idam	putá	cha	potá	cha
G b	rájá	dhammacharañam	idam	putá	cha	potá	cha
D	lájá	dhammachalanam	imam	putápi	cha	nati	*
K	raño	dhammacharañam	ime	putrapi	cha	kunatavo	cha

G a	papotá	cha	devánam	piyasa	Piyadasino	raño
G b	papotá	cha	devánam	piyasa	Piyadasino	raño
D	* * *	devánam	piyasa	Piyadasine	lajine	
K	pranatika	cha	devanam	priyasa	Priyadaśisa	raña

G a	*vadhayisanti	idam	dhammacharañam	á va	^{sa} pavata
G b	vadhayisanti	idam	dhammacharañam	á va	savata
D	pavađhayisanti	yeva	dhammachalanam	imam	—
K	vadhisánti	* *	* * * * *	icha	pavati

G a	kapá	dhammamhi	sílamhi	tistautó	imam
G b	kapá	dhammamhi	sílamhi	tistanto	dhammam
D	akepam	dhammasi	sílasa	bhavisitu	* * *
K	kapa	dhamaśila	* * *	¹⁰ eti * mato	dhamma

G a	anusásisanti	¹⁰ esa	hiso	^{ste} tc	^{im} kame	yathá
G b	anusásisanti	esa	hise	^{ste} tc	kamme	ya
D	asísanti	esa	hise	*	* me	yá
K	ánusásisanti	eva	esa	*	—	yuta

G a	^{dhamm} anusásana ^m	dhammacharaño	pi [†]	na	bhavati
G b	dhammánusásanam	dhammacharañe	pi	na	bhavati
D	dhammánusásana	dhammachalana	pi	cha	no hoti
K	— nusásana	dhamacharana	pi	cha	na bhoti

G a	asíla	sava	imamhi	athamhi	¹¹ dhi	cha	ahini	cha
G b	asíla	sava	imamhi	athamhi	*dhi	cha	ahini	cha
D	asílasa	se	imasa	athasa	vadhi	—	ahini	dha
K	asílasa	so	imisu	atasa	vadhi	—	ahini	cha*

G a	sádhu	etáya	atháya	idam	ⁱ likhapitam	imasa	^{atha} athasa
G b	sádhu	etáya	athá*ya	ida	lekhápitam	imasa	athasa
D	sáya	*tá *	a * iya	—	likhite	imasa	athasa
K	sadhu	ethaye	athaye	ima	lipitam	imisa	athasa

G a	^u vadhaya	jantu	hīni	^{cha} *	^{avyā} lochetaṃ rha	dwādasa
G b	* dhāyu	jantu	hīni	<i>mu</i>	lochetaṃ vyā	dwādasa
D	vadh,yun	jantu	hīni	cha	mā alochayi	duvādasa
K	vādhiya	jantu	hīni	cha	mahigava	rana
G a	vasā	bhisitena	devānam	piyena	Piyadasinā	rāño
G b	vāsā	bhisitena	devānam	piyena	Piyadasinā	rañā
D	vasāni	abhisitasa	devānam	piyāsa	Piyadasine	lājine
K	vasha	bhisitena	devanam	priyasa	Priyadaśisa	raña
G a	idam	lekhāpitam				
G b	idam	lekhāpitam				
D	ya sa	likhite				
K	idam	lipikhataṃ				

THE Kapur di Giri inscription agrees exactly with that of Girnar in the opening passage, and may be rendered, a period is passed of many hundred years (during which) have augmented the destruction of life, the injury of creatures, irreverence to relatives, and irreverence of Brahmans and Sramans; differing in this last clause not only by putting Sramana first, like the Dhauli inscription, as Sramana bramanam, instead of Bāhmaṇa-samañānam, as at Girnar, but by retaining the conjunct, r, and keeping the words separate, or Sramaṇam Brahmanam: we may therefore admit, that the religious mendicants, called, Sramans, are intended as well as, Brahmans, or the sense of the Girnar tablet might be applied to one class of persons only, or Brahman mendicants; that is to say, Brahmans leading a religious not a secular life; for although Sramana is usually applied to Buddhist teachers, yet in its original import it designates any ascetic or religious character. The reading, sapatipati, where that term is repeated, is no doubt an error, either of the original or copy, the negative prefix being omitted.

The inscriptions follow the same tenor in the ensuing passage, with a slight blank in the name of the prince at Kapur di Giri: the next word, dharmacharaṇena, confirms the corrected reading of Girnar; also, charaṇena, not, charāganena, as read by Mr. Prinsep, and rendered by him, by the messenger of the religion of the king. It is rather by or in conformity to King Piyadasi in adherence to the laws of duty, this day a pious proclamation, &c., is made; the participle, vādHITE, apparently supplying the verbal copulative of the sentence, although suspended for an unusual interval.

The sense of what follows is not very obvious, and we have some

irreconcilable differences here, which do not diminish the uncertainty. Instead of, vimána dasaná, (to which, dapana, the first reading, has been corrected,) we have, vimanena daśanena, and in place of, hasti-dasaná, we have what reads like nena; and neti kadchani, for, agi khandáni,—none of which furnish a probable signification. We may acquiesce in the possibility that a procession of cars and elephants is intended, but we cannot accede to Mr. Prinsep's addition, of things to gratify the senses, the meaning he conjectures of,—as he reads it, —aga, (anga) khandáni. The correct reading, however, is, agi khandáni,—the title he tells us of one of Buddha's discourses,—receiving a heap of fire. This is not quite correct, however, for the denomination is, agi khandopamá, and is connected with the designation of, Sutra. Precepts similar to a heap of fire; an epithet perhaps rather than a title. Agi, more correctly, aggi, may be the Pali form of, agni, fire, and, khandáni, is good Sanskrit for parts, or portions. If the reading be accurate, we might rather be disposed to explain it fire-works, which with carriages and elephants were designed to do honour to the Raja's proclamation. The whole passage, however, is of a very questionable purport, and cannot be translated at all with any degree of confidence. The part immediately ensuing is more intelligible, and is of value, as while confirming the sense of the Girnar inscription, it corrects the corrected version. Mr. Westergaard reads, pujanam, worshipping, instead of Prinsep's, pajánam, of people; the equivalent of this is, manisánam, of men, at Dhauli, and, janasa, of men or people, at Kapur di Giri. Pujanam, therefore, must be wrong, and the reading of Girnar should no doubt be, pajánam,—for, prajānám, from, prajā, subjects or people. The sense of the passage is pretty much the same as that given by Prinsep,—and other wonderful appearances (shall be exhibited) to the people looking on, such as have never before been for hundreds of years.

The language of the inscription at Kapur di Giri continues to correspond with that of Girnar; a few defects occur, but they may be readily supplied, and the translation of Mr. Prinsep be followed with little alteration, through the establishment of duty by king Piyadasi, &c., non-sacrifice of living beings, non-injury of creatures, reverence to kindred, respect for Sramans and Brahmans—obedience to father and mother, obedience to elders, these and various other moral duties increase and shall increase. Unluckily the letters which should be equivalent to the, thaira, of Girnar, are too equivocal to explain that term. Mr. Prinsep considers it to be the thero of the Mahavanso, which is not impossible, for that word in Pali merely means aged,

old, being a corruption of, *sthavira*, having the same sense, and to which the Girnar, *tha-i-ra*, presents a still closer resemblance.

This moral edict of King Priyadasi, his sons and grandsons are to observe;—we have in the Kapur di Giri inscription some inaccuracies here, but the words intended are probably, *náti*, and, *pranáti*, for, *naptá*, and, *pranaptá*, grandson, and great-grandson, which appear to have been used also at Dhauli, instead of, *potá*, and, *prapotá*.

Mr. Prinsep's reading of the following words in the Girnar tablet is, *á eva pavata kapá*,—which he proposes to render—as long as the mountains shall endure. The correction of Mr. Westergaard has, *savata kapa*,—a more probable reading—implying, through all kalpas (or ages). In the Kapur di Giri tablet, however, it is, *pavata kapa*,—and may imply,—like a mountain,—*kapa*, for, *kalpa*, implying, similitude, when compounded with a preceding term. The letters before it are, *i-cha*, not, *á-cha*—but they follow a blank to which *i*, perhaps, belongs. *Dhamasila* follows,—omitting the case terminations of the Girnar inscription,—*dhammamhi silamhi*—we have only distinctly, *ti*, for the, *tishtanto*, of Girnar, but the letters may be intended for the same, *tishtatu*, and the whole passage mean, Let the virtuous ordinance of Piyadasi endure as a mountain for the establishment of duty.

The obscurity of the concluding portion of the edict remarked by Mr. Prinsep, is scarcely illuminated by the document of Kapur di Giri,—there is a general conformity, but there are several imperfections. Mr. Prinsep's rendering seems to have omitted the two next words, *dhamma anusásisati*, and proceeds,—“Through good acts of this nature, (i.e., through these ordinances) and the strict practice of religion, laxness of discipline is obviated. Moreover, in this object it is proper to be intelligent, and nowise neglectful.” A less exceptionable translation may be conjectured by connecting the two words omitted with the third, *esa hise*, or in our tablet, *eva esa*, for, *eva-eshu*, or, *eteshu*. Duty will be established in those (acts,—reverence for parents, &c.) The next word is a blank in our inscription, and it is not clear what it should be in the others;—*ste kamme ya*,—for, *ya*, we have, *yu*, but that is possibly an error. If we take the words before *kamme*, for the relative pronouns, *te*, and, *ye*, for, *táni*, and, *yáni*, and, *kamma*, as the representative of, *karmáni*, and regard *dharmanusasam*, and, *dharmacharanam*, as contrasted,—the whole passage may have this import,—“Duty will be established by these (moral acts), for the law which directs ceremonial rites is not the observance of moral duties.” The latter part of the clause is even, if possible,

more obscure,—asila, however, is preferably connected with what follows than with what precedes, and rather denotes a person of ill-conduct than laxness of religion. Instead of Prinsep's unintelligible dhí, we have, vadhi,—with the Dhauli inscription. Ahini, may possibly be intended for, adhini, subject to, and the whole may mean,—“It were well for every ill-conducted person to be subject (or attentive) to this purpose, or the object of this injunction.” The whole being intended to raise moral duty above ceremonial rites.

In the next passage, we have, imam lipi or lipatam, for, idam likhapitam. This writing, instead of, this has been caused to be written.

The next words are also obscure ; they may perhaps mean,—“Let not any thought be entertained by the subject people of opposing this edict,” although, jantu, rather means an animal than people and the sense of, hini, is questionable. Mr. Prinsep renders it, “Let all take heed to profit of this good object, and not to give utterance to objections.”

The concluding phrase of the Kapur di Giri tablet agrees precisely with that of Girnar, except that there is a blank in the place of the number. In place of, Priyadaśíná in the third case we have, however, the sixth or genitive, Priyadaśísa, conforming to the genitive, priyasa, which is the reading at Dhauli. The difference is immaterial to the sense. “This has been caused to be written by King Piyadasi,—having been (twelve) years inaugurated.”

The entire translation, agreeably to the foregoing remarks, and subject to correction, may be thus given.

Proposed Translation.

“During a past period of many centuries, there have prevailed destruction of life, injury of living beings, disrespect towards kindred, and irreverence towards Sramans and Brahmans. But now, in conformity to moral duty, the pious proclamation of King Priyadasi, the beloved of the gods, is made by beat of drum, in a manner never before performed for hundreds of years, with chariot and elephant processions, and fireworks, and other divine

Mr. Prinsep's Translation.

“In times past, even for many hundred years, has been practised the sacrifice of living beings, the slaughter of animals, disregard of relations ; and disrespect towards Brahmans and Sramans :—This day, by the messenger of the religion of the heaven-beloved King Piyadasi, (has been made) a proclamation by beat of drum, a grand announcement of religious grace, and a display of equipages, and a parade of elephants, and things to gratify the

displays of the people exhibiting the ceremonies—(and this) for the promulgation of the law of King Priyadasi, &c., that non-destruction of life, non-injury to living beings, respect to relations, reverence of Brahmans and Sramans, and many other duties, do increase, and shall increase, and this moral law of the King Priyadasi, the sons, grandsons, and great-grandsons, of King Priyadasi shall maintain. Let the moral ordinance of King Priyadasi be stable as a mountain for the establishment of duty, for in these actions duty will be followed, as the law which directs ceremonial rites is not the observance of moral duties. It were well for every ill-conducted person to be attentive to the object of this injunction. • This is the edict (writing) of King Priyadasi. Let not any thought be entertained by the subject people of opposing the edict. This has been caused to be written by the King Priyadasi, in the twelfth year of his inauguration.”

senses, and every other kind of heavenly object for the admiration of mankind, such as had never been for many hundred years such as were to-day exhibited.

“By the religious ordinance of the heaven-beloved King PRIYADASI, the non-sacrifice of animals, the non-destruction of living beings, proper regard to kindred, respect to brahmans and sramans, dutiful service to father and mother, dutiful service to spiritual pastors :—through these and many other similar (good acts) doth religious grace abound ; and thus moreover shall the heaven-beloved King PRIYADASI cause religion to flourish : and the same shall the sons, the grandsons, and the great-grandsons of the heaven-beloved King PRIYADASI cause to abound exceedingly.

“As long as the mountains shall endure, so long in virtue, and in strict observances shall the religion stand fast. And though good acts of this nature, that is to say,—through these ordinances, and the strict practice of religion, laxness of discipline is obviated. Moreover in this object, it is proper to be intelligent, and no-wise neglected. For the same purpose is this (edict) ordered to be written. Let all take heed to profit of this good object, and not to give utterance to objections.

“By the heaven-beloved King PRIYADASI, after the twelfth year of his anointment is this caused to be written.”

TABLET V.

G a	'Devánam	piya	Piyadasi	rájá	evam	áha	kaláña
G b	Devánam	piyo	Piyadasi	rájá	evam	áhá	kaláña
D	Devánam	piya	Piyadasí	lája	hevam	áhá	kayáne
K	'Devanam	priya	Priyadaśi	rāyo	evam	ahati	dekayaña

G a	dakaraya	a	*	*	kaláñe	^{sase} pape	^m dukara	karoti	'ta	mayá
G b	dakaranye	a	*	*	kaláñe	saso	dukaram	karoti	ta	mayá
D	dukale	*	*	*	kayáná	sase	dukalam	kaleti	se	me
K	dakara	na	la	pa	cha	so	daśara	karoti	so	maya

G a	bahu	kaláña	kata	ta	mama	putá	cha
G b	bahu	kaláñam	kata	ta	mama	putá	cha
D	bahuke	kayáná	kate	gam	ye	me	* pu *
K	bahu	kalaña	kata	—	maha	putra	chan

G a	potá	cha	parecha	tanayá	me	^{rapacha} * * *	
G b	potá	cha	parancha	tenaya	me	apacham	
D	naga	*	** * cha	tanaye	apatiye	me	
K	vata	cha	cha	parancha	tanaya	me	apacha

		samvāta		i		
G a	áva	pavata	kapá	anuvatasare	tathá	'so
G b	áva	samvanta	kapá	anuvatisare	tathá	so
D	áva	—	kapam	tathá	anuvatisanta	sa
K	ammanti	ava	kapam	tatha	ye	anavatisanti te

G a	sukatam	kásatí	yo	tu	^a ete	desam	^{sā} pibapeyati
G b	sukatam	kásati	yo	tu	eta	desam	pihāpesati
D	sákatam	kachhati	—	ehe	ta	desam	pihāpayisati
K	sakita	kusati	yo	cha	ati	deśam	prihapivaka

G a	so	dukatam	kásatí	^{sukaram} hi	^{am} pape	atikátam
G b	so	dukatam	kásati	sukaramhi	pápam	atikátam
D	se	dukatam	káchhati	pápeha	supudálayesu	atikantam
K	sa	hakatam	kushanti	papamha	sahane	atikatam

G a	antaram	'na	bhúta	puvam	dhamma	mahámátá
G b	antaram	na	bhúta	puvam	dhamma	mahámátá
D	antalam	no	hútá	puluvá	dhamma	mahamátá
K	antaram	na	bhuta	puva	dhama	mahamatam

G a	nāma	^{to} —	me yá	to	dasa	vasá	bhisitena	—
G b	nāma	ta	me yá	to	dasa	vásá	bhisitena	—
D	nāma	se		te	dasa	* sa	bhisitena	ma
K	nama	so	ti	*	* *	vasha	bhisitena	'ya.

G a	dhamma	mahá	mátá	—	kata	te	—	sava
G b	dhamma	mahá	mátá	—	katá	te	—	sava
D'	dhamma	mahá	mátá	nāma	kata	te	sate	sava
K	dhama	maha	matra	—	kita	te	—	sava

					dhistanáyam			
G a	pásandesu	vyápatá	dhamma	majunaya	*	*	*	*
G b	pásandesu	vyápatá	dhammadhistánaya		*	*	*	*
D	pásandesu	viyapa	dhammádhihánaye					dhammavádhiye
K	pashandeshu	—	dhamadhithayo	cha				dhamavađhiya

						^{yona}		
G a	dhamma	sutasa	cha	—		yena	Kambo(cha)	
G b	dhamma	yutasa	cha	—		yóna	Kambo *	
D	hita	sukháye	cha	dhammasutá	sanyána	Kambocha		
K	hita	sukhaya	cha	dhama	yathasaya	Kambayi		

							^{nam}	
G a	Gandhářá	—		Naristika	Piteñikána	ye		
G b	Gandhára	—		Naristika	Peteñikánam	ye		
D	Gan * * le	—		Suláthika	Pitenike	sa	li	
K	Gandharanam	* * *		* ristakanam	Pitinikanam	ta		

G a	vápi	añas	ápará	tá	bhatamayesu	va	°(pita	su)
G b	vápi	anño	ápará	tá	bhatamayesu	va	* *	*
D	vápi	anne	ápalantá		bhati* * *	*	babhaní	
K	vapi	—	apatara		bhatamayashu	bramani	bhishu	

G a	*	*	*	*	*	*	*	*	*	*	*	*	*	*
G b	*	*	*	*	*	*	*	*	*	*	*	*	*	*
D	anathesu	_____				ma	*	*	*	lokesu	cha	hota		
K	anateshu	vatashu				_____				hita				

					dhamma			
G a	khá	ya	va	*	yutánam	apará	go	dháya
G b	khá	*	*	*	* * mayutána	apará	go	dháya
D	bhisásu		sukháye		dhammayutaye	apali	ba	dhaye
K	—		sukhaye		dhamayutasa	apati	ga	dhra

G a	vyápatá	te	bandhana	badhasa	patividhánáya	7 * *
G b	vyápati	te	bandhana	badhasa	patividhánáya	* *
D	viyapatá	se	bandhanam	*dhasasa	* * ye	apa-
K	vapata	te	¹³ bandhanam	badhasa	patividhanaye	apa-

G a	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *
G b	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *
D	libodhaye	mokhaye	cha	* iya	anubandha	pajati
K	narodhaye	mocha	——	vana	va	* * * pajati

G a	já	katá	bhikaresu	vá	thairesu	vá	vyapátá
G b	ja	katá	bhikaresu	vá	thairesu	vá	vyápátá
D	*	* ta	bhíkala	va	mahálakenti	va	viyápatá
K	—	kita	bhikati	va	mahalaka	va	viyapata

G a	^{te} to	Pátalipute	cha	^k bahiresu	cha	* * * * *
G b	te	Pátalipute	cha	báhi* su	cha	* * * * *
D	se	—— hida	cha	báhilesu	cha	nagalesu savesu
K	*	—— eha	—	bahireshu	cha	nagareshu saveshu

G a	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *
G b	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *
D	olodhanesu	cváhi	bhátanam	— me	——	* * *
K	orodhaneshu	——	bhratuna	cha me	kusuna	cha ye

G a	* * * *	vápi	—	añe	ñatika	
G b	* * * *	ne vápi	me	añe	ñatiká	
D	bhaghininam	va	—	annesu	——	sa*ti
K	——	vapi	—	añe	ñatika	

G a	savata	vyápatá	te yo	ayam	^{dhammanisatito} dha*penūasito
G b	savatá	vyápátá	te yo	ayam	dhammanisatito
D	sávatatam	vayapatá	e	iyam	dhammanisita
K	savatam	viyapata	ye vaye	——	dhamanistisita

G a	táva	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *
G b	tíva	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *
D	tivam	dhammádbithine	táva	dánasayute	va sava	
K	tivara	dhamadbitane	diva	danasayutra	va	*

G a	*	*	*	*	*	*	*	*	*	*	*	*	*	*
G b	*	*	*	*	*	*	*	*	*	*	*	*	*	*
D	pathaviyam								dhammayutasi					
K	*	*	*		asti	stanati	mata	dhamayatasa				*	vaña	
G b		*	*	*	*	dhammamahāmātā	etāya	athāya	āyam					
G a		*	*	*	*	dhammamahāmātā	etāya	athaya	ayam					
D	viyapatā		ime		dhammamahāmātā		imāye		athāye		iyam			
K	viyapatra		e		dhamamahamatra		itayo		athaya		ayo			
G a	dhammalipi		likhitā											
G b	dhammalipi		likhitā											
D	dhammalipāli				sansa	chilathitī	kata	tasa	cha	me				
K	dhamalipi		lipi		*	thiti		va	tinika	bhota				
G a														
G b														
D	pa		*	anavetatu										
K	panja		anuvatanu											

THE inscription opens with the same phrase as those of Girnar and Dhauli,—the king, &c., thus says,—substituting, ahati, as before, for, āha, and it proceeds to the same purport, although it does not assist in removing the difficulty of interpretation experienced by Mr. Prinsep in regard to the corresponding passage. It is most in accordance with the Dhauli inscription, giving, kayana, for, kalana, good; but this word is preceded by a character exactly the same as the, de, of, deva,—the purport of which is questionable. There are some other doubtful syllables in, na la pa, but the other words are much the same. They offer also, as noticed by Mr. Prinsep, an analogy to a passage on the Dehli Lat, and possibly express the same sentiment, namely:—"He that perverts good to evil, will reap evil from good,"—but the obvious inaccuracies and deficiencies of the inscription render this liable to question.

The next few words are the same, kalana, being here used for, kāyana. We then have variations, but they are possibly of transcript rather than of design, as, maha puta chan data cha, should very probably be the, mama putā cha potā cha, of Girnar. The next words agree with, apacha, for, apatya, progeny. Instead of, āva savata kapa—or, avasamvanta kapa, the corrected reading of Girnar, we have in the first place a word which is uncertain, for the power of the initial letter is not ascertained,—it sometimes appears as t, but

it bears a nearer affinity to, a, with the addition of a cross bar at the foot. We may guess it to be intended for, am, and read the word, ammantī, for, anumanyante, they obey or assent to; ava kapam, for, samvanta kapá follows. For the words anuvatisare tathá, we have tatha ye anavatísanti, confirming the Dhauli reading, anuvatisanta—for anuvarttishyante—so they who shall follow or imitate them—they shall obtain or attract good; sukita kusati, for, sukataṃ kásati, or, karshati, as proposed in the explanation of Tablet VII., published on a former occasion. The following sentence is evidently intended to be the same in the three inscriptions, but the word, prihapivaka, is less likely to be correct, perhaps, than the, pihápesati, of Gírnar, although the latter is not very intelligible: hakatam, also, although distinct enough, is possibly an error for the, dukatam, of the other inscriptions,—the sense of the passage can be but very vaguely guessed at, although it may mean, and he who transgresses the rule shall suffer misfortune. The reading of Kapur di Gíri, papamha sahane, may be thought more satisfactory than that of Gírnar, sukaramhi pápam, the purport of which it is difficult to conjecture, as we may connect it with, mahámátá, for, mahamátra, the great minister, and render the whole, the chief minister of the law has for an unprecedentedly long time been endurant of the occurrence of wickedness; therefore, the inscription continues, in the tenth year of the inauguration, supervisors of moral law are appointed by me;—the word, dasá, ten, is unfortunately obliterated; but as the rest corresponds with the Gírnar text, and the space is that of a short dissyllabic word,—we may infer that it had a place in Kapur di Gíri.

The term, majunaya, which Mr. Prinsep conjectured to be intended for, majjana, drowning, is corrected by Mr. Westergaard to, dhisthánaya, or with dhamma preceding it, dhammadhisthánáya for dharma-dhisthánáya.—This is confirmed by the Kapur di Gíri tablet, which has dhammadhithaya,—omitting incorrectly one syllable. This correction makes the meaning of the passage clear enough. It has nothing to do with overwhelming believers, but is simply,—In the tenth year ministers of morals were appointed by me, for the purpose of presiding over moral law among all the religionists; pashanda, signifying the follower of any religion—not heretic, as will be subsequently shewn. We have an additional clause here, as well as at Dhauli, there being a flaw in the rock at Gírnar, dhamma vádhiya hita sukháye cha, which may be rendered, and for the encouragement of those disposed to observe the moral law. The countries in which the followers of various religions are to be found, are apparently named in the Kapur di Gíri inscription as, Kambaya, Gandhára,

—ristaka and Pitinika, agreeing apparently with Girnar and Dhauli, in the two first and the fourth. The third name is defective, wanting the first three or four letters, but the latter part might be read, ristakanam,—and the whole may be therefore, Naristakanam,—equivalent to the, Naristike, of Girnar. In the latter the termination of the genitive plural is confined to the last of the four names, treating them as one compound. In the Kapur di Giri inscription, we have each name in the genitive plural, except the first, which is in the nominative singular—a matter of no consequence in the document. The corrected copy of the Girnar inscription appears to prefix, yona, to the rest, instead of, yena, as at first read. Kamboja, and, Gandhara, are now fully identified as countries in the north-west of India, but the other names have not been met with elsewhere.

In the following passage we have additional readings as in the Dhauli inscription, arising apparently from some mutilation of the Girnar tablet, in the left angle of all except the four first lines; a circumstance not noticed by Mr. Prinsep, although in consequence of the difference between them he gives separate translations. Except, however, where these defects occur, the passages appear to be intended for the same, and are equally unsatisfactory and obscure. The general sense may be conjectured, and the ministers of morality are apparently enjoined to promote the happiness of the well-disposed among—what may be intended for classes, bhatamayesu, consisting of the military, Bramani bhishu, Brahmans and mendicants, for bhikshushu, anathesu, for anartheshu, or anátheshu, those who are destitute, and vatashu, for which no satisfactory meaning can be proposed.

The following terms, apatiga dhra vapata te, correspond with the, apalibadháye viyapatá, of Dhauli, and aparágodháya vyápati of Girnar, all puzzling enough, and certainly not meaning, not within knowledge or restraint of passion, as proposed by Mr. Prinsep. We may conjecture them representing, apratignatah vyapyeyu, may spread abroad without impediment; but this is mere conjecture. The next phrase is more intelligible, for removing the bondage of the bound: the next is clearly incorrect; but it is probably intended to express something of the same purport, for the liberation of those who are obstructed. The continuation corresponds pretty nearly with the Dhauli inscription, and may mean that holy science may be inculcated amongst the mendicants, or amongst the mighty; but the construction is very defective. The Kapur di Giri inscription agrees with that of Dhauli in omitting the word, Pátálipute, found at Girnar;

nor have we any term corresponding to, hida, here, in this place. We have, bahireshu, for the, bahilesu, of Dhauli, and, bāhiresu, of Girnar, which, though barbarous, may be intended for, bahishu, outer or foreign; followed by, nagareshu saveshu olodhaneshu (avarodhaneshu), in all cities and fortresses, words defective at Girnar.

We next have, bhratuna, corresponding with the bhatanam, of Dhauli, but with the addition of me, of my brother, and being in the singular instead of the plural; also, kusuna, corresponding with, bhaginīnam, with the same difference of number; the word itself being also probably an error for, Sasuna, the Pali of, Swasri, sister: here also we have the personal pronoun, and we may understand that the king extends his injunctions to the districts governed by his brother and his sister, or as the text proceeds, any other of his relations; the injunction is to be every where circulated.

The following passages conform to the tenor of the Dhauli inscription, but with variations ascribable to defects in both, either in the original or the transcripts; something like an approach to meaning may however be made out, and without any assistance from Girnar, in which a flaw partially occurs; but there is apparently an injunction, that the ministers of morals, those who are appointed as superintendents of morals, (Dhammadhitina, Dharmadhistāyinaḥ,) shall wherever the moral law is established give encouragement to the charitable and well-disposed. The Girnar inscription ends with the remark, For this purpose this moral edict is written, which at Dhauli is continued by what Mr. Prinsep renders with apparent correctness, let my people obey it, *tasa cha me pa (ja) anavetatu*; which appears in the less intelligible form of, *va tinika bhota panja anuvatantu*; the sense is possibly the same, and so may be the text if rightly rendered. We may now propose the following version of this tablet, subject to very great reservation, of which a comparison with Mr. Prinsep's version will sufficiently evince the necessity.

Proposed Translation.

The beloved of the gods King Priyadasi thus proclaims: who ever perverts good to evil will derive evil from good, therefore much good has been done by me and my sons, and grandsons, and others my posterity (will) conform

Mr. Prinsep's Translation.

"Thus spake the heaven-beloved King PRIYADASI:—

"Prosperity (cometh) through adversity, and truly each man (to obtain) prosperity causeth himself present difficulty—therefore by me (nevertheless) has much pros-

to it for every age. So they who shall imitate them shall enjoy happiness, and those who cause the path to be abandoned shall suffer misfortune. The chief ministers of morality have for an unprecedently long time been tolerant of iniquity, therefore in the tenth year of the inauguration have ministers of morality been made, who are appointed for the purpose of presiding over morals among persons of all the religions for the sake of the augmentation of virtue, and for the happiness of the virtuous among the people of, Kamboja, Gandhara, Naristaka, and Pitenika. They shall also be spread among the warriors, the Brahmins, the mendicants, the destitute, and others, without any obstruction, for the happiness of the well-disposed in order to loosen the bonds of those who are bound, and liberate those who are confined, through the means of holy wisdom disseminated by pious teachers, and they will proceed to the outer cities and fastnesses of my brother and sister, and wherever are any other of my kindred: and the ministers of morals, those who are appointed as superintendents of morals, shall wherever the moral law is established, give encouragement to the charitable and those addicted to virtue. With this intent this edict is written, and let my people obey it.

perity been brought about, and therefore shall my sons, and my grandsons, and my latest posterity, as long as the very hills endure, pursue the same conduct; and so shall each meet his reward! While he, on the other hand, who shall neglect such conduct,—shall meet his punishment in the midst of the wicked [in the nethermost regions of hell].

“For a very long period of time there have been no ministers of religion properly so called. By myself, then, in this tenth year of mine anointment, are ministers of religion appointed*; who, intermingling among all unbelievers (may overwhelm them) with the inundation of religion, and with the abundance of the sacred doctrines. Through *Kam (bocha, gan) dhara, narastika, Pitenika*, and elsewhere finding their way unto the uttermost limits of the barbarian countries, for the benefit and pleasure of (all classes) . . . and for restraining the passions of the faithful, and for the regeneration of those bound in the fetters (of sin?) are they appointed. Intermingling equally among the dreaded, and among the respected—both in *Pataliputa* and in foreign places, teaching better things shall they everywhere penetrate; so that they even who (oppose the faith shall at length become) ministers of it.”

The Cuttack version of the Fifth Tablet, from the star.
 —who shall be intermingled with all the hundred grades of unbelievers for the establishment among them of the faith, for the increase of religion, and for their profit and gratification through the context of the sacred doctrines, in *Kambocha* and *Gandhara*, in *Surdastika* and *Pitenika*, . . . and even to the furthest (limits) of the barbarian (countries). Who shall mix with the *Brahmans* and *Bhiksus*, with the poor and with the rich,—for their benefit and pleasure, to bring them unto the righteousness which passeth knowledge; and for those bound in the fetters (of sin) this new bond of precious knowledge is made for their final emancipation which is beyond [understanding: and among the terrible and the powerful shall they be mixed both here and in foreign countries, in every town, and among all the kindred ties even of brotherhood and sisterhood, and others . . . everywhere! and here also having penetrated, for there is religious darkness (?) even in the very metropolis of religion, every question shall be asked among the charitable, and these being themselves absorbed in righteousness, shall become ministers of the faith(?). For this express reason is this religious edict promulgated; for ever more let my people pay attention thereto!

TABLET VI.

G a	'Devánam	piya	Piyadasi]	rájá	evam	áha	atikátam
G b	* * *	**	* * *si	rájá	evam	áha	atikátam
D	Devánam	piye	Piyadasi	lájá	hevam	ahá	atikanta
K	'Devanam	priyo	Priyadasí	raya	evam	abati	atikatam

G a	antaram	'na	bhuta	puva	sa *	* *	atha kamme
G b	antaram	na	bhúta	puva	sa *	* la	atha kamme
D	* * lam	na	húta	puluve	savam	kálam	atha kamme
K	antaram	na	bhuta	puva	sava	kala	* * * *

G a	va	pativedaná	vá	ta	mayá ^m	eva	katam 'save kále
G b	va	pativedaná	vá	ta	mayá	evam	katam save kále
D	va	pativedaná	tá	se	ma	maya	kate sa * * *
K	va	pativedana	ta	—	maya	eva	kita savam kalam

G a	bhunjamána	same	—	úrodhanamhi	gabbhágáramhi
G b	bhunjamána	same	—	orodhanamhi	gabbhagáramhi
D	* * *	same	ate	olodhanasi	gabhatapasi
K	esimana	same	—	orodhanasi	gabthagarasi

G a	yachamhi	va	'vinítamhi	cha	uyánesu	cha	savata
G b	yachamhi	va	vinítamhi	cha	uyánesu	cha	savata
D	* * *	*	vinítasi	—	uyenaja	*	savata
K	yachasi	—	vinatasi	—	uyanasi	—	savatra

G a	pativedaká	stitá	athe	me	janasa	pativedetha	—	iti
G b	pativedaká	stitá	athe	me	janasa	pativedetha	—	iti
D	pativedaká	—	janasa	atham	pativedayantu	ma	ti	
K	prativedaka	—	atha!	—	janasa	prativedeka	me	—

G	savata	cha	janasa	athe	karomi	ya	————	cha
G b	savata	cha	janasa	athe	karomi	ya	————	cha
D	sa*	*	cha	já *	sa athám	kalámi	tra ha	ampi cha
K	savatra	cha	janasa	atha	karomi	yapi	—	roki ka

G a	kinchi	mukhato	añapayámi	awayam	mayá	dapakam	vá	
G b	kinchi	mukhatá	añapayámi	swayam	—	dapakam	vá	
D	kichhi	makháta	anapeyami	—	—	dapakam	vá	
K	—	makhata	anapayámi	* * *	[	* pika	va	

G a	stavápakam	vá	yavá	puna	—	maháthetesu	—	
G b	sávapakam	vá	yavá	puna	—	maháthatesu	—	
D	savakam	vá	eva	mahá	—	ma *	—	
K	—	—	eva	dhayaka	pi	nama *	tadhava	

G a	ácháyika	añapita ^{ro m}	bhavati ^l	etáya	atháya	vivido	ni	
G b	ácháyika	aropitam	bhavati	táya	atháya	vivado	ni	
D	atíyáyike	alopite	hoti	tasi	athasi	vade	vani	
K	achayika	ña* nasa	bhoti	taya	athaye	viyo pa	*na	

G a	kíti ^{jhati}	vasanto ^p	parisáya ^m	anantara ^m	pativedarasam ^{etay}			
G b	kati	vasanto	parisáyam	ánantaram	pativedetayam			
D	kíti	vásantam	palipaya	anantaliyam	pativadeta	va		
K	* *	*ma	parivayesha	antariyena	pativedetasa			

G a	me	—	savatá	save	kále	—	evam	mayá
G b	me	—	savatá	save	kále	—	evam	mayá
D	me	ti	savata	savam	kálam	—	evam	ma
K	me	—	¹savata	ti a *	* tra	janasa	karomi	—

G a	añapitam	násti	hi	me	to	ren ^{so}	ustínamhi	atha
G b	añapitam	násti	hi	me	to	so	ustánamhi	atha
D	anusatha	nathá	*	*	*	*	sana	*hapi
K	atrayutaka	*	*	vika	añapi	cha aha]	dapaka	va śravaka

G a	santíranáya	va	katavya	matehi	me	sama
G b	santíranáya	va	katavya	matehi	me	sava
D	athasantílanáya	cha	kataviya	matehi	me	sava
K	va yata	pana	mahamata	na	achayoti	*
G a	loka hitam	¹⁰ tasa	cha	puna	esa	múlo ustánam cha
G b	loka hitam	tase	cha	puna	esa	múle ustánam cha
D	loka hite	tasa	cha	panai	yam	mule suthána *
K	aropita	bhoti	taya	athaya	vividesa	vanijati ra pati-
G a	atha santíraná	cha	⁴ nasti	kammata ⁶ rām	¹¹ sava	loka
G b	atha santíraná	cha	násti	hi kammata ⁶ rām	sava	loka
D	*	santílaná	cha	nathi	hi kammatalam	sava loka
K	shaye	anantariya	na	patividetaro	me	savatra savam
G a	hitastáya	cha	kinchi	parákamámi	aham	kinti
G b	hitattáya	cha	kinchi	parákamámi	aham	kinti
D	hitáya	*	chatí *	* palakamáva	hakam	kíti
K	kalam	evam	añapitam	maya	* * * *	sti hi me ta
G a	bhútánam	ananám	gachheyam	¹¹ idha	cha	náni
G b	bhútánam	ananám	gachheyam	idha	cha	náni
D	bhútánam	a *	niyam	ye	hati	hida cha káni
K	taña	athasantiranaya	pi	katava	mana *	trali me sava
G a	sukhápayámi	paratá	cha	swagam	arádhayantú	ti etáya
G b	sukhápayámi	paratá	cha	swagam	arádhayantu	ta etáya
D	sukhayámi	palatá	cha	swaga	basádhayantu	ti etáye
K	loka	hitam	tasa	cha	mulam	etra alanam atha san
G a	atháya	¹³ ayam	dhammalipí	likhápitá	kinti	chiram
G b	atháya	ayam	dhammalipí	lekhápitá	kinti	chiram
D	a * *	*yam	dhammalipi	likhitá	chila	—
K	tirasa	cha	na *	hi kamatara	¹⁶ sava	loka hita ti * ya
G a	tisteya	iti	tathá	cha	me	putá potá cha papotá
G b	tisteya	iti	tathá	cha	me	putá potá cha papotá
D	thiti *	hotu	tatha	cha	—	potá — papotá
K	cha	kichi	parakamama	kiti *	tañam	anani desa va cha
G a	—	—	cha	¹⁴ anavataram	savaloka	hitáya
G b	—	—	cha	anuvata ⁶ rām	savaloka	hitáya
D	me	palakama	sa*	* * *	ka	ki hitáye
K	yam	ihachashu	sukhayami	paratam	cha	saga aradhatu

G a dukaranthtu idam añata agena parákamena
 G b dukarantu idam añata agena parákamena
 D dukale cha iya annata bhena palákamena
 K etaya athaye ayi dhamalipi tha sti(?)tu titika bhotu
 taíha cha me putráñantaro parakramatu sa * hi * *
 thaya ma bhata ta yasa ama * añata age para-
 kamena.

THE opening is as usual with, *ahati*, for *áha*, as before, the king says; and it proceeds as at Girnar, for an unprecedentedly long time, in all seasons and in all acts there has been,—*pativedaná*, or *prativedaná*, which Mr. Prinsep proposes to render, “a system of instruction,” and understands the edict to have for its purport the establishment of a plan for the education of the people. The word, *prativedaná*, as derived from, *vid*, to know, in the active or causal form, may mean communicated knowledge certainly, but it is not commonly employed in this acceptation, and it can scarcely be so used in this place, as no Indian kings, it is to be presumed, would send instructors into the inner apartments, the *Garbhagriha*, the lying-in-chambers of his subjects’ wives, to train the shoot before it had sprung into existence. It runs more consistent with probability therefore to use the term in a less comprehensive sense, and to restrict “the communication of information” to the person of the Raja, agreeably to the alternative suggested by Mr. Prinsep, and to understand the edict as enjoining a vigilant system of *espionage*; the immediate communication to the Raja of everything that occurs.

The Kapur di Giri inscription continues for some time to run parallel with that of Girnar, with a few imperfections and some variations; as, *savam kalam*, for *save kále*, and *esimana*, for *bhunjamána*, which is a word of doubtful correctness. The sign of the singular locative is also, *si*, instead of the more regular Pali, *mhi*, as, *gabha-garasi*, for *gabhagáramhi*; we have also, *vachasi*, for *vachamhi*, the singular for the plural, but these are differences of little moment, and we may translate the whole, “These representations are (to be made) at all times, and in all acts; therefore it is enjoined by me, that at all times, whether eating, or in the palace, in the inner apartments, in discourse, in exchange of courtesy, in gardens, everywhere the persons appointed to represent affairs shall convey to me the objects of the people.” The inscription confirms the reading of Girnar, *pativedaká* or *prativodaka*, the representer, or intelligencer; intending, perhaps, by the noun of agency, an officer whose duty it was to make known, to report all matters. The repetition of, *prativedaka*,

is a less satisfactory reading than the, pativedayantu, of Dhauli, let them represent; but it may be admitted. The pativedetha of Girnar is less intelligible, although it may be intended for the second person of the plural, of the imperative, do ye represent. The three inscriptions all continue intelligibly enough, I will always attend to the objects of the people, the Kapur di Giri having, atha, for the, atham, or, athe, of the others; Sanskrit, artham or arthán: and they agree also in the passage that follows, and that which I command myself verbally, or from my mouth.

The concurrent reading of the inscriptions is then interrupted, but it is unnecessary to attempt to reconcile them, or to seek to elicit any meaning from the next five lines (in Roman characters) of the Kapur di Giri inscription beginning with, pika va, and extending to the readings, dapaka va sravaka; for the whole passage has been evidently twice inserted, either through some error of the original or the copy; and the first series of the reiteration is full of errors, as is shown by the second, which conforms with more than usual closeness to the text of the Girnar inscription, except in a few words near the close. The best mode of making this dislocation of the parallel versions intelligible, will perhaps be the repetition of the whole inscription from dapakam vá, exclusive of the part of that of Kapur di Giri inclosed within brackets, and restoring the rest of the latter inscription to its proper place in the comparative arrangement. It will be sufficient to repeat along with it only the corrected inscription of Girnar.

G b	*	*	*	*	*	*	*	*	*	*	dápakam	vá
K	*	*	*	*	*	*	*	*	*	*	dapaka	va

G b	sávapakam	vá	yavá	puna	maháthatesu	íácháyika	aro-
K	śravaka	va	yata	pana	mahamatana	achayoti	aro-

G b	pitam	bhavati	táya	atháya	vivado	ni	kati	vasanto
K	pita	bhoti	taya	athaya	vividesa	vani	jati	ra

G b	parisáyam	ánantaram	—	pativedetayam	me	savatá
K	patishaye	anantariya	na	pativedetaro	me	savatra

G b	save	kále	evam	mayá	añápitam	násti	hi	me	to
K	savam	kalam	evam	añapitam	maya	* sti	hi	me	ta

G b	so	ustánumhi	atha	santíranáya	va	katavya	matehi	—
K	taña	—	atha	santiranáya	pi	katava	mana*	trahi

G b	me	sava	loka	hitam	¹⁰ tase	cha	puna	esa	múle
K	me	sava	loka	hitam	tasa	cha	————	mulam	
G b	ustánam	cha	atha	santíraná	cha	násti	hi	kamma-	
K	etra	átanam	—	atha	santirasa	cha	na *	hi	kama-
G b	taram	¹¹ sava	loka	hitattáya	cha	kinchi	parákamámi		
K	tata	¹⁶ sava	loka	hitati*ya	cha	kichi	parakamama		
G b	aham	kinti	bhutánam	anannám	gachheyam	¹² idha	cha		
K	—	kiti	*	taúnam	anani	desa	va	cha	yam
G b	náni	sukhápayámi	paratá	cha	swagam	arádhayantu			
K	ihachashu	sukhayami	paratam	cha	saga	aradhatu			
G b	ta	etáya	atháya	³ ayam	dhammalipí	lekhápitá	kinti		
K	—	etaya	athaye	ayi	dhamalipi	tha	sti	tu	titika
G b	chiram	tisteya	iti	tathá	cha	me	putá	potá	cha
K	bhotu	————	tátha	cha	me	putrañantaro			
G b	papotá	cha	¹⁴ anuvataram	sava	loka	hitáya	dukarantu		
K	parakramatu	sa *	hi *	*	thaya	ma	bhata	ta	yasa
G b	idam	añata	agena	parákamena					
K	ama	*	añata	age	parakamena				

It is not easy to suggest a satisfactory interpretation of the beginning of the passage. Mr. Prinsep renders *dápakam* and *stávakam*, satire and eulogy, or what is agreeable or disagreeable; but *stavakam* was a wrong reading, and is corrected to *sávapakam*, the sense of which is doubtful; the Kapur di Giri reads *śravaka* or *śavaka*. *Dápaka* might be the Sanskrit word for fine or punishment, and the antithesis would require reward, but this is merely conjectural. *Mahathatesu* may be intended for *mahamátreshu*, and *acháyika* is probably, as Prinsep supposes, designed for *atyáyika*, although that can scarcely denote an awarder of punishment. If it were *atyayita* it might be, more or exceeding. We have here in the Kapur di Giri version, *achayoti*, but it is more correctly written in the first part *achayika*. *Aropitam bhavati*, in the repeated passage is, *aropita bhoti*, corresponding with it; and the whole may mean, whatever I declare verbally, whether it be punishment or reward, is intrusted further to the superintendents of morals.

The succeeding phrases, although tolerably concurrent, are of very doubtful import, and are evidently incorrect; but it looks as if those

dwelling near one another were invited to become informers; with this object let those dwelling, *vasanta*, in contiguous residences apprise me always and at all times; *patishaye* for *pratisraya*, a residence, is a preferable reading to *parisayam*. *Ustanamhi*, as Prinsep observes, is a doubtful word. *Atha santiránáya*, he translates, for the collection of wealth, but it may rather be intended for the distribution of wealth; *arthánám samuttíranam*; that liberality which is to be done is designed by me, for the benefit of all mankind, for liberality is the root of virtues; *ustánam*, is a word of uncertain origin and form, and we derive no help from the extra *atanam* of *Kapur di Giri*. The next is intelligible; no deed is more conducive to the benefit of the world, which I endeavour to promote.

The parallel continues in what follows, but there are some variations of no assistance in the interpretation, which is not obvious beyond a general purpose, according to which the King says, of the various beings over whom I pass (or rule) I confer happiness on many in this world, let them afterwards seek for *Swarga*; *gachheyam*, I may go, is distinct enough, but its purport is equivocal. It and the context cannot signify, as Prinsep has it, I pass over mention of other things. Therefore for this purpose this sacred edict has been caused to be written. The concluding paragraph, on the whole, is tolerably intelligible in the *Girnar* inscription; that of the *Kapur di Giri* is possibly intended for the same, but it is probably erroneous.

The connected translation of this division agreeably to the foregoing conjectures will then run thus :—

Proposed Translation.

The beloved of the gods, King *Priyadasi*, thus declares :—"An unprecedentedly long time has past since it has been the custom at all times, and in all affairs, to submit representations. Now it is established by me that whether at meals, in my palace, in the interior apartments, in discourse, in exchange of civility, in gardens, the officers appointed to make reports shall convey to me the objects of the people. I will always attend to the objects of the people, and whatever I declare verbally,

Mr. Prinsep's Translation.

Thus spake *PIYADASI*, the heaven beloved King !

"Never was there in any former period, a system of instruction applicable to every season, and to every action, such as that which is now established by me.

"For every season, for behaviour during meals, during repose, in domestic relations, in the nursery, in conversation, in general deportment, and on the bed of death, everywhere instructors (or *Pativedakas*) have been appointed. Accordingly do

whether punishment or reward, is further intrusted to the supervisors of morals (or eminent persons),—for that purpose let those who reside in the immediate vicinage even become informers at all times, and in all places, so it is ordained by me. The distribution of wealth which is to be made is designed by me for the benefit of all the world, for the distribution of wealth is the root of virtues. There is nothing more essential to the good of the world for which I am always labouring. Of the many beings over whom I rule I confer happiness in this world,—in the next they may obtain Swarga. With this view, this moral edict has been written; may it long endure, and may my sons, grandsons, and great-grandsons after me, continue with still greater exertion to labour for universal good.

ye (instructors) deliver instruction in what concerneth my people.

“And everywhere in what concerneth my people do I myself perform whatsoever with my mouth I enjoin (unto them); whether it be by me (esteemed) disagreeable, or whether agreeable. Moreover, for their better welfare among them, an awarder of punishment is duly installed. On this account, assembling together those who are dwelling in the reputation of much wisdom, do ye meanwhile instruct them as to the substance of what is hereby ordained by me for all circumstances, and for all seasons. This is not done by me in any desire for the collection of worldly gain, but in the real intention that the benefit of my people shall be effected; whereof moreover, this is the root, the good foundation, and the steady repose in all circumstances: there is not a more effectual mode of benefitting all mankind, than this on which I bestow my whole labour.

“But upon how many living beings (I will pass over the mention of other things) do I confer happiness here:—hereafter likewise, let them hope ardently for heaven! Amen!

“For this reason has the present religious edict been written:—May it endure for evermore; and so may my sons, and my grandsons, and my great-grandsons uphold the same for the profit of all the world, and labour therein with the most reverential exertion.”

TABLET VII.

G a	'Devánam	piya	Piyadasi	Rájá	savata	ichhati	save
G b	Devánam	piyo	Piyadasi	Rájá	savata	ichhatí	save
D	Devánam	piye	Piyadasi	lájá	sachata	ichhati	* *
K	'Devanam	priyo	Priya(da)śi	Raja	savatra	ichhati	sava

G a	pásandá	vaseyu	save	te	sayaman	cha	'bháva-
G b	pásandá	vaseyu	save	te	sayaman	cha	bháva-
D	hánanda	vase	*	ti save	paga	sachhaman	bháva-
K	*pashanda	vaseyu	save	ite	sayaman		bhava-

G a	suddhin	cha	ichhati	jañasa	uchávacha	chhando	
G b	suddhin	cha	ichhati	jano tu	uchávacha	chhando	
D	sudhi	cha	ichhanti	munisá	uchávucha	chhandá	
K	śudhi	cha	ichhanti	'jano cha	uchavacha	chando	

G a	uchávacha	rágo	te	savam	va	kásanti	ekadesam	va
G b	uchávacha	rágo	te	savam	va	kásanti	ekadesam	va
D	uchávucha	lágá	te	savam	vá	————	ekadesa	* *
K	uchavacha	rago	te	savam	va	————	ekadeśam	va 'pi

G a	kásanti	^{pu} visuletu	pi	dáne	yasa	násti	sayame	
G b	kásanti	vipúle	tu pi	dáne	yasa	násti	sayame	
D	* chati	vidalá	pi na	dáne	asa	nathi	dhayame	
K	kashanti	vipule	pi cha	dane	yasa	nasti	sayama	

G a	bhávasudhítá	va	katamñatá	va	dadhabhatítá	^v ra	
G b	bhávasuddhitá	va	katamñatá	va	dadhabhatítá	va	
D	mávasudhi	cha	————	—	————	—	
K	bhava'śudhi	—	katañata	—	dadhabhatita	—	

G a	^{ch} ni va	bádham.
G b	nichá	bádham.
D	niche	bauḍham.
K	nicha	paḍham.

It is scarcely necessary to repeat the insertion of the seventh tablet, as it has been already given in a preceding number of the Journal, and the remarks made upon the purport of the greater portion of it do not seem to require revision. The original transcript, however, by Mr. Prinsep, was not placed in collateral position with

that of Mr. Westergaard, and the extent and value of his corrections could not, in consequence, be justly appreciated. I have thought it advisable, therefore, to repeat the comparative copy on the same plan as the other portions of the Inscription. I am also desirous of expressing my concurrence in the correctness of some suggestions communicated by Mr. Westergaard to Mr. Norris, affecting particularly the concluding passage, in which he reads, *bhāvasuddhitā*, and, *drirha bhaktitā*, as well as, *kritajnatā*, or purity of disposition and steady devotion, along with gratitude, which readings are no doubt correct. *Nicha*, also, as he suggests, represents, *nitya*, always. It is not, however, easy, even with these amendments, to give a satisfactory translation of the whole passage, as the construction beginning with, *vipule pi dāne*, is not clear, and the sense of *sayame*, and, *bādham*, are also questionable. It may be rendered perhaps,—where there is great liberality,—although in moral conduct there is not purity of disposition, gratitude, or steady devotion—yet it is always well.

TABLET VIII.

G a	^a Atikátam	antaram	rájano	vihárayátám	^a ñeyapu	
G b	Atikátam	antarām	rájano	vihárayátám	ñayásu	
D	* * * ta	antalam	lāja	vahalayátam	náma	
K	¹⁷ Atikátam	antarane	rajamiya	viharayata	name	
G a	eta ———	magavyá	añani	cha	etárisáni	² abhira-
G b	eta ———	magavyá	añani	cha	etárisáni	abhira-
D	* khamisa *	gamaviyam	annáni	cha	edisáni	atira-
K	nikhamisha	gamagaye	añane	cha	edisani	atasa-
s						
G a	makáni	ahumpum	so	devánam	piyo	Piyadasi rája
G b	makáni	ahumsu	so	devánam	piyo	Piyadasi rája
D	máni	puvam tinam	se	devánam	piye	Piyadasi lāja
K	mana	abhavasu	so	devanam	priyo	Priyadaśi raja
m bo						
G a	dasavasá	bhisito	santo	ayáyasatam	cha	³ tenesá
G b	dasavasá	bhisito	santo	ayáyasam	? dhitena	sá
D	desesaya	bhisite	janikha	ma sam bo	pa * * tena	tá
K	daśavasha	bhisito	santu	nikamisaye	dhitena	ta

G a	dhammayátá	etayam	hoti	bámhaña	samañánam	
G b	dhammayátá	etayam	hoti	bámhaña	samañánám	
D	dh * * *	sa	hotiti	samanu	babhanánam	
K	dhamayatra	ctaya iye	hoti	śramañam	bramañanam	
G a	dasañe	cha dāne	cha thairánam	dasaño	cha 'hirañña	
G b	dasañe	cha dāno	cha thairánam	dasañe	cha hirañña	
D	dasana	cha dave	cha vadhánam	dasano	cha hilanna	
K	daśane	cha dava	—	anu * * *	* * hiraña	
G a	patividhāno	cha janapadāsa	cha janasa	daspanam		
G b	patividhāno	cha jánapadāsa	cha janasa	dasanam		
D	peḍhaviṇānena	jánapadāsa	—	janasa	datane	cha
K	patividhane	cha paja nasa	—	janasa	ḍaṇsana	—
G a	dhammānusasti	cha dhamma	pari	puva	cha	
G b	dhammānusasti	cha dhamma	pari	puchhá	cha	
D	dhamonupa	* * * *	* *	* chha	cha	
K	dhammanuśati	—	dhamma	pari	prutachhu	—
G a	*tadopayá	esá	bhayarati	bhavati	devánam	piyasa
G b	tadopayá	esa	bháyarati	bhavati	devánam	piyasa
D	tádāpayá	*sa	abhlilame	potá	devánam	piyasa
K	tadopayam	etc	bhayerati	bhoti	dévanam	priyasa
G a	Piyadasino	raño	bháge	año		
G b	Piyadasino	raño	bháge	año		
D	Piyadasine	lajine	bhage	* na		
K	Priyadaśisa	raño	bhage	añe		

THE reading of the Kapur di Giri inscription agrees with that of Girnar, with a few exceptions, which may possibly be owing, in part at least, to imperfect transcription.

In the first passage, we have some characters interposed between, raja, and, viharayata, the form of which is doubtful, and may be merely the plural ending of the noun, followed by the pronoun, ye. Instead of the, *neyapu*, corrected *neyasu*, of Girnar, a word of doubtful interpretation, and which cannot have the sense Prinsep conjectures for it, or gaming, we have what appears to be the reading of Dhauli, *náme*, verily. The following term also concurs with the Dhauli inscription, *as*, *ni-khamisha*. We have also in place of the, *magavye*, of Girnar,—a word not improbably rendered by, *mrigayá*, hunting, a modification of the Dhauli word, *gama víyam*—or as Prinsep reads

it, magaviyam, and in, gamagaye, magaye, would be satisfactory, but then, ga, must be attached to the preceding term, as nikhamishaga—a very unintelligible word. The first portion might represent, nikshamá, nikshamishaye, a derivative form of nikshamá, sin, impatience, intolerance, but the latter cannot be well accounted for, and we may suggest for it, nishkrameshu, in goings abroad. Atasamana is probably erroneous, and the word that follows, abhavasu, should be either, abhavum, or, abhavinsu,—if intended for the third person plural of the preterite. Prinsep read it, ahum pumso,—but in Mr. Westergaard's copy it is, ahumsu, which, if as it seems to be, is meant for the verb, is a word unknown. In the uncertainty that attaches to several of the expressions we may admit something like Mr. Prinsep's translation, although with considerable reserve. "In time past, princes, verily have been eagerly addicted to amusement and the chase: and other similar diversions have been (indulged in), but now Priyadasi having attained the tenth year of his reign adopts a different course." The passage that immediately follows the name of the king is read by Mr. Prinsep, ayáya satam,—which he renders "for the happiness of the wise," but the reading is, ayáyasam, not, satam,—the following words are doubtful except the last. In place of ayáyasam, we have in the Kapur di Giri table, nikamisaye, the first member of which may imply, exempt from passion or desire, as nishkána, and the latter be intended for, swayam, self,—but which, as a whole, is not very intelligible. The words that follow have some affinity to those of Girnar, but neither inscription perhaps is quite correct. There is evident want of syntactic connection in the sentence as it stands, which is literally,—“Priyadasi being in his tenth year, (?) by him awakened this moral course,”—there is no verb to make up the sentence; dhiteua-ta, the apparent reading of Kapur di Giri, for, dhiteua sá of Westergaard's Girnar inscription does not afford any light; but a valuable correction is obtained from Captain Jacob, who makes the doubtful letter of Westergaard clearly, bo, or bau, and which with the following makes, bodhiteua, awakened or instructed.

The remainder of the inscription is in close accordance with • that of Girnar, with a few defects. The general sense is clear enough. Dharmayátá,—moral course or festival should be constructed apparently with what follows it—or that moral course (pursued) by him consists in this:—In seeing Brahmanas, Sramanas, and in giving them gifts, in seeing elders and in distributing gold, and in the government of the people; in the latter clause we have in the Kapur di Giri tablet, danásana, in place of, dasana, not, daspanam, as at first read at

Girnar. As the use of the seventh case ends here, and dhammanusasti, is in the first, we may take it as the beginning of a new sentence, and render it, the institution of moral laws and reciprocal investigation of moral duties; dhamma paripuchchá, for, dharma pariprichhá, not, paripuva, as read in Prinsep's copy of the Girnar inscription, which is corrected by Westergaard, and is confirmed by the, cha, of Dhauli, and the evidently incorrect reading of Kapur di Giri, pariprutachhu, for, paripuchha cha. These are the means of effecting that (moral course) and these are in another portion (life) the removal of fear from King Piyadasi, the beloved of the gods; both inscriptions read, bhaya-rati, not, abhaya rati, which Prinsep renders enjoyment without alloy; rati, does mean pleasure, but it may also imply, cessation, and if the first member of the compound be, bhaya, fear, some such signification seems necessary.

Proposed Translation.

In past times Kings were addicted to travelling about, to companions, to going abroad, to hunting and similar amusements, but Piyadasi, the beloved of the gods, having been ten years inaugurated, by him easily awakened, that moral festival is adopted, (which consists) in seeing and bestowing gifts on Brahmanas and Sramanas, in seeing and giving gold to elders, and overseeing the country and the people; the institution of moral laws and the investigation of morals; such are the devices for the removal of apprehension, and such are the different pursuits of the favourite of the gods, King Piyadasi.

Mr. Prinsep's Translation.

"In ancient times, festivals for the amusement of sovereigns consisted of gambling, hunting the deer (or antelope), and other exhilarating pleasures of the same nature. But the heaven-beloved King PIYADASI, having attained the tenth year of his anointment, for the happiness of the wise hath a festival of religion (been substituted):—and this same consists in visits to brahmans and sramans, and in alms-giving, and in visits to the reverend and aged; and the liberal distribution of gold, the contemplation of the Universe and its inhabitants, obeying the precepts of religion, and settling religion before all other things, are the expedients (he employs for amusement) and these will become an enjoyment without alloy to the heaven-beloved King PIYADASI in another existence."

TABLET IX.

G a	Devánam	piyo	Piyadasi	rájá	evam	áha	^{sti} atta	jano
G b	Devánam	piyo	Piyadasi	rájá	eva	áha	asti	jano
D	Devánam	piye	Piyadasi	lāja	hevam	kaha	* *	* ne
K	¹⁶ Devanam	priyo	Priyadaśi	rāya	evam	ahati		jano
G a	uchávacham	mangalam	karote	ábádhase	vá	² aváha		
G b	uchávacham	mangalam	karote	ábádhesu	vá	aváha		
D	*chávacham	mangalam	kaletáti	a *dha	*	*	*	
K	uchavacha	magalam	karoti	abadhasa	va	ativaha		
G a	ⁱ viváhesu	vá	putalábhesu	vá	^{mmhi} pavásamhi	vá	etamhi	
G b	viváhesu	vá	putalábhesu	vá	pavásamynhi	vá	etamhi	
D	* * *	* * *	dá	ya	pavásasi	—	etaye	
K	paja	—	patu di	—	pavasa	—	ataya	
G a	cha	^{ana} aññamhi	—	cha	jano	uchávacham	man-	
G b	cha	aññamhi	—	cha	jano	uchávacham	man-	
D	—	annaye	va	hedisaye	* ne	bahukam	man-	
K	—	aññaye	va	hadisi	* * *	na datu	—	man-
G a	galam	karote	^{ota} ta	tu	mahádáyo	bahuka	cha	
G b	galam	karote	eta	tu	mahádáyo	bahukam	cha	
D	galam	ka * *	* * *	* * *	* * *	* * *	*	
K	galam	karoti	ata	tu	striyaka	bahu	—	cha
G a	bahuvidha	cha	^{chh} yadam	va nira	charadatham	cha	mangalam	
G b	bavuvidham	cha	chhadam	va	niratham	cha	mangalam	
D	ithíbinam	cha	*	su	* ni ayam	cha	mangalam	
K	bahuvidhi	cha	putika	cha	niyastiyam	cha	mangala	
G a	karote	ta	^u katavyameva	ta	mangalam	apaphalam	tukho	
G b	karote	ta	katavyameva	tu	mangalam	apaphalam	tukho	
D	kaleti	se	kativiyē	ledhena	* antale	apapale	chakha	
K	karoti	se	katavo	a	mangala	apaphalam	tukho	
G a	^r etadisam	mangalam	^{ntu} áyata	maháphale	—	—	—	
G b	etarisam	mangalam	ayan tu	maháphale	—	—	—	
D	esahadise	manga	* * *	* * phale	e	* malati		
K	etadi	mata kho	—	mahaphalam	ye	ma		

G a	mangale	ya	dhamma	mangale	tata	dása	bha-
G b	mangale	ya	dhamma	mangalo	tateta	dása	bha-
D	lata	tesa* *		da *	sisam	nuham	ka-
K	mangala	¹⁰ ti	asa	ima	—	dasa	bha-

G a	takamhi	sampatipatí		^j gurúnam	apachiti	sádhu	*pánesu
G b	takamhi	sampatipatí		gujunam	apachiti	sádhu	pañesu
D	leti	* * * *		alanam	* * *	* *	* *
K	takasu	samapatipatí	va	garanam	apachiti	—	pasadha

G a	sayame	sádhu	bamhaña	samañánam	sadhu	dánam	^a ete
G b	sayame	sádhu	bamhaña	samañánam	sádhu	dánam	eta
D	* *	* *	samana	bábhánanam	—	dane	esa
K	sayama	—	samana	branananam	—	dana	esa

G a	cha	añe	^á cha	etarisam	dhamma	mangalam	náma a
G b	cha	añe	cha	etárisam	dhamma	mangalam	náma ta
D	—	anc	cha	* * * *	* *	mangavala	* * *
K	—	aña	cha	—	dhamasa	* * *	* * *

G a	vatavyam	pitá	va	*putena	va	bhátá	vá swámikena
G b	vatavyam	pitá	va	putena	vá	bhátá	vá swámikena
D	* * *	pitina	*	* na	pi	bhatina	pi suvamika
K	* sava	pitana	sava	putena	sa	bhata	, * * *

G a	^á va	ida	sadhu	idam	katavyam	mangalam	áva tasa
G b	vá	idam	sadhu	idam	katavya	mangalam	áva tasa
D	* * *	* *	* *	* *	* *	* *	ava tasa
K	* kana	pi	mata	sasta	tena	ava	*prativatiye na

G a	athasa	nisthánáya	asti	cha	ⁿ pávutam	*sádhu	dánam iti na
G b	athasa	nisthánaya	asti	cha	pávutam	sádhu	dána iti na
D	athasa	nidhatiya	a *	la *	namvato	dane	sadhati
K	imasa	tra	tatha	* *	* saka	vasti	mangalam

G a	tu	etádisam	asti	dánam	va	anugaho	va yádisam
G b	tu	etarisam	asti	dána	va	anagáho	va yárisam
D	so	nathi	* *	* nam	vá *	* *	* * *
K	ye	tu	sa	etu	jacha	taviya	dita tadika ^o ima

G a	dhammadánam	va	dhammánugaho	^a vá	ta	tukho	mitena
G b	dhammadánam	va	dhammanugaho	va	ta	tukho	mitena
D	dhammadáne	—	dhammanugahe	*	*	*	* * *
K	kusiye	eva	laki	mangalam	sasayo	kitam	siyato

G a	va	suhadayena	—	ñatikena	va	sapáyena	va
G b	va	suhadayena	va	ñatikena	va	suhayena	va
D	*	*	*	*	*	chinena	— sapáyena tivi
K	tatha	data	kayati	sayapanena	ihā	lobha	cha aya

G a	ochaditavya	^v tamá	^{hi} tamhi	^a pakarāne	idam	kacham	idam
G b	ováditavyam	tamhi	tamhi	pakarane	idam	kacha	idam
D	yovadita	*		paka	*	nasi	i * * * *
K	dhamadanasa	*	*	*	*	*	ya dhama

G a	sádhu	iti	ⁱ imáni	saka	*	*	*	swagam	^{etu} áradhentu	iti
G b	sadhu	iti	imini	saka	*	*	*	swagam	árádhetu	iti
D	*	*	*	*	*	*	*	*	*	dhayita ve
K	ananam	atham	na	divati	ita	*	*	*	a	prataramam

G a	kácha	*	*	*	^{ina} miná	^{ram} katavyata	yathá	ⁱ swagárádhi
G b	kácha	*	*	*	iminá	katavyataram	yatha	swagárádhi
D	*	*	*	*	*	*	*	tale alabhi
K	va	pañapasa	va	*	hara	pakhanam	thani	divatoti
	varo	abhi	asuladham	bhoti	orochaso	asti	pablata	
	dhata	pañapasa	ka	pha	dina	ta	mangala.	

THE inscriptions begin alike, and the general import is the same, the contrast between rejoicings on temporal occasions, and the joys which should be identical with good deeds. The term, mangala, not meaning as Prinsep has rendered it, happiness, but auspiciousness, and the demonstrations which express the feelings excited by any prosperous event—the beloved of the gods, Priyadasi observes,—every man is celebrating a variety of rejoicings. Prinsep reads, attajano, which he interprets, every man for himself; a sense it could not admit if it were the representative of átina jano,—but the corrected reading is, asti jano. At Kapur di Giri, we have simply, jano,—which is the best of all,—“he celebrates them on occasions of recovery from sickness (of escape from calamity),” or, a-bádhesu,—from, bádha, injury of any kind,—not as Prinsep renders it, ábad-dhasi, in bonds of affection. What, aváha, signifies, is doubtful, it may be intended for, áváha, inviting, or as it is combined with, viváha, marriage, it may perhaps mean betrothing; or at the birth of children, or on setting forth on journies, on this and other like occasions, a man holds many festivals. The Kapur di Giri inscription is here imperfect, and apparently, as is usual, agrees best with the Dhauli inscription,—being to the same purport as the Girnar, although using

other forms,—as, *paja*, or, *paja*, for, *puta*, and with less correctness, *ataya*, *anaya vá*, for, *etamhi*, *anamhi*.

The next sentence presents a variety in the *Kapur di Giri* inscription, which reads apparently, *striyaka*, or, *sriyaka*, in place of the, *mahádáyo*, of *Girnar*;—neither word can bear the sense which Prinsep gives it, of great ruination; as, *mahádáya*, rather signifies, a person of great charity or benevolence, and this seems most congruous with the sense of the other term, as,—“but thi beuevolent man, he also makes many and various kinds of pure and disinterested rejoicings—and that is what is to be done.” The Sanskrit equivalent of, *chhadam*, in the *Girnar* inscription is doubtful; the *Kapur di Giri* has, *putika*, which can scarcely be correct. *Nir-atham*, may be for, *nirartham*,—without any interested object; the equivalent word at *Kapur di Giri*, may be read *nirastiyam*, although the, *r*, is doubtful, and it probably should be, *niratham*. The, *chara-datham*, of Prinsep was incorrect.

The inscription then apparently contrasts the two sorts of *mangala*,—the temporal, and the moral or religious. That or such (the temporal) rejoicing is without fruit, and is mere chaff,—but, the festival that bears abundant fruit is the festival of duty (*Dharma-mangala*), such as the reverence of the servant to the master—respect for holy teachers; *áyatam*, of long continuance, according to Prinsep, is corrected to, *ayan tu*, but this: another correction occurs in Mr. Westergaard's reading here, of, *gujanam*, for, *gurunam*,—but in that case the original must be inaccurate, as the term is without meaning, and the *Kapur di Giri* inscription confirms Mr. Prinsep's first reading, having also, *garanam*, or, *gurunam*, of *gurus*, or spiritual teachers. We have then the general conformity continued, although the term, *sádhu*, does not seem to be repeated, nor to be used as a substantive. *Sadhu panesu*, *sayame sadhu*, must mean purity in respect to living beings, purity in self-restraint. The *Kapur di Giri* tablet reads apparently *pasa (u) dha (?) sayama*, restraint with respect to animals,—connecting it with what follows, or donations to *Sramanas* and *Brahmanas*. These and other (like) acts constitute the festival of duty, and such a festival is to be cherished as a father by a son, or a dependent by a master. *Bhátá*, here can scarcely signify a brother, as it is obviously connected with, *swámika*, a master, and is more probably intended for, *bhrita*, one who is supported, a dependant.

The *Girnar* inscription proceeds,—this is good, this is the festival to be observed,—and continues, with a few exceptions, to be sufficiently intelligible. It differs, however, so widely from the *Kapur di Giri*, that a collateral interpretation of their meaning is no longer

possible. In rendering the Girnar inscription into English, I should be disposed to vary from Mr. Prinsep in some respects, although the general purport of the recommendation of moral and benevolent acts, in place of temporal festivity, is the burthen of both our translations. The purport of the first word, áva, is unknown, it may be a particle for, atha, so:—for the establishment (nisthánaya), of this object virtuous donation is practised,—pavuttam, or, pravrittam, not, prá-vitam, concealed, secret. “There is no such charity or benevolence, as that which is moral (righteous) almsgiving or moral (righteous) benevolence. That is chaff, and is to be reprehended, either with a friend, a companion, a kinsman, or an associate:” Suhadayena, is no doubt intended for, Suhridayena, although it be synonymous with, mitra. The corrected copy of the Girnar inscription reads, ovádítavya, —apavádítavya, to be shunned or blamed, not ochadítavya,—rendered by Prinsep, utadítavya, to be observed. He takes no notice of, tukho, either now or on its former occurrence, which is intended apparently for, tusha, chaff, straw, or empty, vain;—nor has he attended sufficiently to the purport of the pronoun, tá, for, tad, that, referring to that above described temporal sort of, mangalam, or rejoicing. In this manner, this is to be done, this is good,—with these means let a man seek, Swarga,—this is to be done, this is to be performed when Swarga has been obtained, aradhi; or better as at Dhauli, alábhi.

A translation of the corresponding portion of the Kapur di Giri inscription is wholly impracticable—many of the letters are very questionable, and many of the words unmeaning, and the original may have been blunderingly sculptured, or the transcript may be defective, even beyond the deficiencies acknowledged to occur here. That something like the sense of the Girnar inscription is intended may be conjectured from the recurrence of the word, mangalam. We may also conjecturally render two or three detached passages as, kitam siyato, kritam syát, let it be done: ila lobha ava dhama dánasa, here (in this world) the desire of any other than righteous gift, Ya dhamma ananam atham na divati, that law which does not seek the good of others.

Proposed Translation.

The beloved of the gods Pi-yadasi Raja, thus says: every man that is, celebrates various occasions of festivity; as on the removal of incumbrances, on invitations, on marriages, on the birth of a son,

Mr. Prinsep's Translation.

Thus spake King PIYADASI, beloved of the gods!

“Each individual seeketh his own happiness in a diversity of ways: in the bonds of affection, —in marriage, or otherwise,—in

or on setting forth on a journey; on these and other occasions a man makes various rejoicings. The benevolent man, also, celebrates many and various kinds of pure and disinterested festivities, and such rejoicing is to be practised. Such festivities are fruitless and vain, but the festivity, that bears great fruit, is the festival of duty, such as the respect of the servant to his master; reverence for holy teachers is good, tenderness for living creatures is good, liberality to Brahmans and Sramanas is good. These and other such acts constitute verily the festival of duty, and it is to be cherished as

father by a son, a dependant by his master. This is good, this is the festival to be observed, for the establishment of this object virtuous donations are made, for there is no such donation or benevolence as the gift of duty, or the benevolence of duty, that (benevolence) is chaff, (which is contracted) with a friend, a companion, a kinsman, or an associate, and is to be reprehended. In such and such manner this is to be done; this is good; with these means let a man seek Swarga, this is to be done, by these means it is to be done, as by them Swarga has been gained.

the rearing of offspring,—in foreign travel :—in these and other similar objects, doth man provide happiness of every degree. But there is great ruination, excessive of all kinds when (a man) maketh worldly objects his happiness. On the contrary, this is what is to be done,—(for most certainly that species of happiness is a fruitless happiness,)—to obtain the happiness which yieldeth plentiful fruit, even the happiness of virtue; that is to say :—kindness to dependents, reverence to spiritual teachers are proper; humanity to animals is proper : all these acts and others of the same kind, are to be rightly denominated the happiness of virtue!

“By father, and by son, and by brother; by master, (and by servant) it is proper that these things should be entitled happiness. And further for the more complete attainment of this object, secret charity is most suitable :—yea, there is no alms, and no loving kindness comparable with the alms of religion, and the loving kindness of religion, which ought verily to be upheld alike by the friend, by the good-hearted; by kinsman and neighbour, in the entire fulfilment of pleasing duties.

“This is what is to be done : this is what is good. With those things let each man propitiate heaven. And how much ought (not) to be done in order to the propitiation of heaven?”

TABLET X.

G a 'Devānam piyo Piyadasi rājā yaso va kīti vā na
 G b Devanam piyo Piyadasi rājā yaso va kīti va na
 D * * * piye Piyadasi lā * yaso vā vidhī va na
 K "Devanam priyo Priyadaśī raya yaso va kīti va na

G a mahāthā va hi mañate añata — tadāptano doghāya
 G b mahāthā va hā mañate añatā — tādāttano dighāya
 D * * * bo na * * si yaso va kaḍhāvā ichhati ta dwaye
 K mahatha va ha mañati añatra yo pi yaso sriti va

G a cha me janā ^{susansā} 'dhammachatusā ^{su} pūsunsatā *
 G b cha me janā dhammasusunsā ^a sususa tam *
 D annati ja * ne * * * * * su punasu * a *
 K imati tena tasa ayatiya cha tada dhamasa

G a _____ ^a dhammavatān ^{cha} va anuvidhi-
 G b _____ dhammavatam cha anuvidhi-
 D _____ dhamma * * va * * *
 K sāsahasa sāsḥrusa amiti dhamavatam cha anuvidha-

G a yatām eṭa kāye ^o devānampiya Piyadasi rājā yaso
 G b yatām eṭa kāya devānampiyo Piyadasi rāja yaso
 D * * eṭa kāye * * * iyo * * * * *
 K yatam eta kāye devanampriyo Priyadaśī raya yaso

G a va kīti 'va ichhati 'ya tu kinchi parākamāte devā-
 G b va kīti va ichhati ya tu kichi parākamate devā-
 D * * * * * davi * * palākamati devā-
 K — kīti va ichhati ye tu kichi parakramati devā-

G a nam (piyo) Piyadasi rāja ta savam pāratikāya
 G b nam (piya) Piyadasi rāja ta savam paratikāya
 D nam piye Piya * * * * *
 K nam priyo Priyadaśī raya tasa vam paratikaye

G a kinti sakale ⁱ apaparāsave asa esa tu parāsaveya
 G b kinti sakale apaparīsāve asa esa tu parisaveya
 D kintisakama apapalāsave apa kiti pamasa * *
 K vasati sakale aparīsave suyati eshe tu parasaveyam

G a	apunñam	'dukaranta	kho	etam	chha vadakena	va	janena
G b	apuññam	dukarantá	'kho	etám	chhadakena	va	janena
D	* * *	* * *	a kaje	va	* * *	* * *	
K	apuñam	dukaratu	kho	eshe	va	dakena	— tagena
G a	usatena	va añata	agena	parákamena	savam	pará	i
G b	usatena	cha añata	agena	parákamena	savam	pari	
D	* * *	ta	age *	* * *	na savam	—	
K	osadhña	tava	*gena	parakamena	savam	paviti	ji
G a	cha	jiptá	eta	takho	— — —	— — —	usatena
G b	cha	jipta	eta	takho	— — —	— — —	usatena
D	cha	palili	* * *	* khu	dakena	lápasa	usatena va usatena
K	—	—	eta	cha	osa	* * *	* * *
G a	—	dukaram.					
G b	—	dukaram.					
D	cha	dakalata.					
K	* * *	* * *					

THE inscriptions open alike with the name and title of the Prince, with this difference, that here and in the subsequent repetitions of the word, Ráya, is used for, Raja, a provincialism which is not usual at Girnar, the subsequent words also correspond, maháthá va ha (hi,) mahate, for which we may admit Mr. Prinsep's translation, although it would appear as if no distinction were made between the nominative and objective cases.

The following in the Girnar tablet, is, as Mr. Prinsep observes, unintelligible without correction, but the corrections made by his Pandit cannot be allowed.

Mr. Westergaard's version suggests a correction more palpable, and authorises us perhaps to read the text, tad attano dighaya, that has been my own (fame) for a long time, as well as of my people. The Kapur di Giri inscription is totally different, and also apparently requires correction, at least the change of, imati, to, ichhati, a change borne out by the reading of the Dhauli inscription, which is else of little service. We may render the Kapur di Giri inscription, "but on the other hand, he who desires wealth by fame,—by him observance of duty, &c., is to be followed,"—ayatiya, is a doubtful word, but in the rest, the words agree with the Girnar tablet as corrected by Westergaard, and may be rendered,—“Let the service of the

moral law, and the service of the righteous be followed ; this is to be done."

We have then the like double repetition of the prince's name in both, the beloved of the gods, wishes fame and renown, and inasmuch as he excels, the beloved of the gods, &c., it is of him for future happiness. In the following we have, *vasati*, he or it dwells instead of, *kinti*, which may be intended for, *kin-tu*, but. The sense of the following is not very clear. Mr. Prinsep renders, *aparasave*, immortality, but Westergaard's reading is, *apaparisave*, and that of Kapur di Giri, apparently, *aparisave*. It seems more likely also, that the words are in the nominative case than in the fourth, and as Prinsep supposes it may be intended for, *parisrava*,—which may be interpreted, fame, reputation. The sense of the passage will then be,—all this (worldly fame,) is worthless reputation, which is the reputation of the unrighteous, a source of pain and empty ; uniting, *kho*, with the, *ta*, or *tu*, that precedes, and which is else referred to, *dukaran*. The following again is a series of perplexities ; as Prinsep observes and the Kapur di Giri inscription does not help us. The terms would seem rather to refer, however, to the sources of worldly fame, and imply that by whatever means acquired it was profitless and painful as compared with the credit derived from the observance of, *dhama*. Mr. Prinsep reads the two first words, *etam vadakena*, and, *vajanena*, but Westergaard has, *etam abhadakena*, and of the second, it is questionable if it should not be divided, *va janena*,—by people, associating it with the word that follows, *usatena*,—the meaning of which, however, is doubtful. In the Kapur di Giri inscription, we have for it apparently, *osadhina*, for perhaps, *avasadhuna*—impure or vulgar people, opposed to, *dakshina*, clever or distinguished, or if we take *chhadakena* for *chhalakena*, we may render it by crafty, and the *usatena*, may be intended for, *asatyena*, untrue, or, *asatena*, unrighteous: implying, but by whatever effort it is acquired it is empty, and a source of pain. *Parácha*, *jiátá*, is in Westergaard's copy, *paricha jipta*, or *jitta*,—at Kapur di Giri, *paviti ji eta*,—in either case it is not easy to propose a satisfactory equivalent. The concluding word, *dukaram*, both in this place and where it formerly occurs, instead of representing, *dukha-karam*, cause of pain, may perhaps be preferably rendered, *dushkaram*, difficult of attainment; which would give a different purport to the latter part of the interpretation, and would not be incompatible with the words preceding it, *apunnam* for *apunyánam*, difficult for the unrighteous; and *asatyena dushkaram*, difficult to be acquired by untruth; but the general sense would be as uncertain as before, and in

proposing any translation of this tablet, a comparison, rather than a solution of difficulties is intended.

Proposed Translation.

The beloved of the gods, the Prince Piyadasi, does not esteem glory and fame as of great value, and besides for a long time it has been my fame and that of my people, that the observance of moral duty and the service of the virtuous should be practised, for this is to be done. This is the fame that the beloved of the gods desires, and inasmuch as the beloved of the gods excels, (he holds) all such reputation as no real reputation, but such as may be that of the unrighteous, pain and chaff; for it may be acquired by crafty and unworthy persons, and by whatever further effort it is acquired, it is worthless and a source of pain.

Mr. Prinsep's Translation.

"The heaven-beloved King PIYADASI doth not deem that glory and reputation (are) the things of chief importance; on the contrary (only for the prevention of sin) and for enforcing conformity among a people praise-worthy for following the four rules of virtue, and pious, doth the heaven-beloved King PIYADASI desire glory and reputation in this world, and whatsoever the heaven-beloved King PIYADASI chiefly displayeth heroism in obtaining, that is all (connected with) the other world.

"For in everything connected with his immortality, there is as regards mortal things in general discredit? Let this be discriminated with encouragement or with abandonment, with honour, or with the most respectful force, and every difficulty connected with futurity shall with equal reverence be vanquished."

TABLET XI.

G a	Devánam	piyo	Piyadasi	rāja	evam	áha	násti	etári-
G b	Devánam	piyo	Piyadasi	rāja	evam	áha	násti	etári-
K	Devanam	priyo	Priyadasi	raya	evam	ahati	násti	edi-

G a	sam	dánam	yárisam	dhammadánam	dhammasanstavo	vá ^a
G b	sam	danám	yárisam	dhammadánam	dhammasanstavo	vá
K	sam	danam	yadisam	dhammadanam	dhammasanstavo	—

G a dhammasamvibhago vá dhammasambandho vá tata idam
 G b dhammasamvibhágo va dhammasambandho va tata idam
 K dhammásamvibhago — dhammasambandha va * ta idam

G a bhavati dásabhatakamhi sampatipatí mātari pitari
 G b bhavati dásabhatakamhi samapatipatí mātari pitari
 K ——— danam bhatakranam samapatipatí mata pitushu

G a sádho sususá ^{mitapastata} mitasasuta — ⁱñatakánam bāmahña
 G b sádhu sususá mitasastata — ñátikánam bahmana
 K suśrusha mi * tasa stata ñatakañam ———

G a samañánam sádhu dánam pánanam anárambho sádhu
 G b samaná sádhu dánam pánanam anárambho sádhu
 K samanabamanasa * * danam prananam anarambho ———

G a etam ^ávatavyam pitá va putena va bhátá — va
 G b eta vatavyam pitá va putena va bhátá — va
 K etam vatavo pitrena pi putrena pi va bhatena pi va

G a ——— ^{nati}mitasa sutena bhatakena va vyava pati-
 G b ——— mitasasa sta bhatikena va ava pati-
 K mitrena pi mitrasa sta tuna — ava pati-

G a vesiyehi * idam sádhu idam katavyam so tathá karui
 G b vesiyehi idam sádhu idam katavyam so tathá katai
 K vesiyena — sadhu ida katavo so tatha karatam

G a — ^{ch}lokavasa ^áárádha ^ahoti parato vá anantam puñam
 G b — lokavasa aradho hoti parata cha anantam puñam
 K iha loka cha aradheti — parata cha anantam puñam

G a ——— bhavati tena dhammadánena.
 G b ——— bhavati tena dhammadánena.
 K krasava bha * ti tena dhamadanena.

THE portion of the Girnar inscription contained in the eleventh table which is not found at Dhauli, occurs at Kapur di Giri with a singularly exact conformity to the inscription at Girnar. The sense of this, as Mr. Prinsep observes, is clear: it might be doubted if his interpretation of, dharma-dána, the giving or teaching of virtue, be correct, as the ordinary meaning is merely a gift of any kind from a pious or virtuous motive: the context, however, seems to warrant his

explanation. There are no uncertainties of reading until we come to the, mitasa suta, of Prinsep, corrected to mitasa stata, which is rather unintelligible. Suta is most probably wrong, for when the words recur shortly afterwards, suta, has been preceded by putra, a son, and there can be no need of both. The Kapur di Giri inscription has, mitrasa tata, which would be satisfactory, tata, meaning, tatak, then, also, and; but in the second place we have, mitra sastatuna, which is equally puzzling, particularly as we have, mitra, before, showing that, mitrasasta, is something else; if we could read the whole, mitrasat-tuna, it might mean, to friend and foe; but this is scarcely allowable. The Kapur di Giri inscription is more consistent than that of Girnar in its use of the instrumental case in this part for all the terms. Pativesiyena in place of pativesiyehi is only the singular for the plural. Mr. Prinsep renders, Bhatakena, by Bhritakena, a labourer, but the corrected reading is, bhatikena, which will rather be bhar-trikena, by a master.

In the following passage, the Kapur di Giri tablet, however, reads, iha, preceding it by, karatam, which can scarcely be correct: it also inserts a very unintelligible term, krasava, which must be a mistake. Prinsep reads, karu-i-loka, but Westergaard has, kata, with which the i, may perhaps be preferably attached; kata-i, for, kritwa, having done i, for, iha, or, idam, is unusual, and it is not wanted.

Proposed Translation.

Thus says the beloved of the gods King Priyadasi: there is no gift like the gift of virtue, whether it be the praise of virtue, the apportionment of virtue, or relationship of virtue. This (gift) is the cherishing of slaves and dependents, pious devotion to mother and father, generous gifts to friends and kinsmen, Brahmanas and Sramanas: and the non-injury of living beings is good. In this manner, it is to be lived by father and son, and brother, and friend, and friend's friend (?), and by a master (of slaves), and by neighbours. This is good, this is to be

Mr. Prinsep's Translation.

Thus spake PRIYADASI, the king beloved of the gods!—

“There is no such charity as the charity which springeth from virtue,—(which is) the intimate knowledge of virtue, the inheritance of virtue, the close union with virtue! And in these maxims it is manifested:—“kindness towards servants and hirelings; towards mother and father, dutiful service is proper: towards a friend's offspring, to kindred in general, to Brahmanas and Sramanas, almsgiving is proper: avoiding the destruction of animal life is proper.”

practised, and thus having acted, there is happiness in worldly existence, and hereafter great holiness is obtained by this gift of virtue.

“And this (saying) should be equally repeated by father and son, (?) by the hireling, and even so by neighbours in general!

“This is excellent—and this is what ought to be done!

“And whoso doeth thus is blessed of the inhabitants of this world: and in the next world endless moral merit resulteth from such religious charity.”

TABLET XII.

G a 'Devánam piyo Piyadasi rájá sava pásandáni cha pava-
G b Devánam piye Piyadasi rája sava pásandáni cha pava-

G a jitáni cha gharistáni cha pújayati dánena cha vidadháya
G b jitáni cha gharistáni cha pújayati dánena cha vidadháya

G a cha pújaya pújayati ^{ne} ná'na tu tathá dánam va púja
G b cha pújaya pújayati nena tu tathá dánam va puje

G a va devánam piyo manñate yathá kiti sára vadhi asa
G b va devánam piyo manñate yathá kiti sára vadhi asa

G a sava pásandánam sáro vadhí^uta bahuvídhá 'tada gasa
G b sava pásandánam sára vadhítu bahuvídhá tasa tasa

G a tu idam mûla^m ya va chagutí kinti áptapásanda
G b tu idam mûlam ya va vigutí kinti áttapásanda

G a pujá parápásanda garahá va ^{no}ñe bhava apakarañamhi
G b pujá parápásanda garahá va no bhava apakarañamhi

G a lahaká va asa 'tama tamhi pakarañe pújeta yá tu
G b lahaká va asa tamhi tamhi pakarañe pújeta yá tu

G a eva parápásandá tena tena pakarañena evam katam
G b eva parápásandá tena tena pakarañena evam katam

G a áptapásanda cha vadhayati parápásandasa cha ^uapakaroti
G b áttapásanda cha vadhayati parápásandasa cha upakaroti

G a *tadanñathá karoti áptapásandam cha chhañati parápá-
G b tadantethá karoti áttapásandam cha chhanoti parápá-

G a sandasa cha hi apakaroti yo hi káchi áptapásandan
G b sandasa va pi apakaroti yo hi káchi áttapásanda

G a pújayati parapásandam va garahati *sava áptapásanda
G b pújayati parapásandam va garahati sava áttapásanda

G a bhatiyá kinti áptapásandam dípaye ma iti yo cha
G b bhatiyá kinti áttapásandam dípaye ma iti so cha

G a puna tatha karoti áptapásandam bádhatar^uam papapunáti^{ha}
G b puna tatha karoti áttapásandam bádhatar^uam upahanáti^{ha}

G a tasa^{ma} che váno^{yo} eva sádha^{dha} *kinti mañamanñasa^u dham-
G b tasa ma váyo eva sádhá kinti mañamanñasa dham-

G a mam suñáta^s cha pusanserava^{cha} evam hi devánam
G b mam suñája cha susunseracha evam hi devánam

G a piyasa ichhá kíti saya pásandá^v bahu pútá^{su} cha asu
G b piyasa ichhá kinti sava pásanda bahu sutá cha asu

G a kalánágamá cha asu *ye cha tata^{sannate} tata papunñata hi
G b kalánágama cha asu ye cha tatá tata pasannáte hi

G a vatavyam devánam piyo íe tathá dánam va púja
G b vatavya devánam piyo no tathá dánam va pújá

G a va manñate yathá kinti sári^{ñá} vadhi asa sava pásan-
G b va manñate yathá kinti sára vadhi asa sava pásan-

G a dānam bahuká^a cha etáya *atháya vyapatá dhamma
G b dānam bahaká va etáya athá vyápatá dhamma

G a mahámátá^a cha ithaijha^{cha} kho mahámátá cha vava ka-
G b mahámátá cha itt^ahijha kha mahámátá cha vacha bhú-

G a míká cha añe cha nikáyá ayan cha etasa phaláya
G b míká cha añña cha nikáye ayan cha etasa phalaya

G a áptapásanda vadhi cha hoti dhammasa cha dípaná
G b áttapásanda vadhi cha hoti dhammasa cha dípaná

I do not find in the Kapur di Giri inscription anything that corresponds with the twelfth division of the inscription at Girnar, and it will be recollected that it is also wanting at Cuttack. Mr. Prinsep has proposed to account for the omission at the latter place, by supposing that it might not have been thought necessary, for as the Buddhist religion prevailed already in Kalinga, it was not requisite to enjoin its propagation or enforce the conversion of heretics in that province. It may be reasonably doubted, however, if the inscription has reference to conversion of any kind, and whether the term, *Páshanda*, as it is used in these tables, admits of the ordinary translation of unbeliever. Such a sense is clearly incompatible with the opening passage which declares that King Piyadasi honours or worships, (*pujayati*) all *páshandas*, he worships them with gifts, and with worship (or honours) of various kinds. There can be no doubt of the rendering, the words are distinct, and their sense is clear enough, and we cannot conceive of a pious king making a public announcement that heresies are the objects of his especial reverence and bounty. *Páshanda*, must therefore, have some other sense, and the remainder of the edict, indicates its meaning to be any form of religious faith, any profession of belief.

There runs throughout the inscription, as Mr. Prinsep remarks, a frequent repetition of the terms, *ápta pásaṇḍa*, and, *para pásaṇḍa*, as the mutual antitheses of each other. The first he renders converted heretic, from, *ápta*, aptus, gained, the latter, unconverted; understanding by, *para*, extreme, ultra,—but, *para*, properly signifies other, or further, and cannot admit of such a latitude of interpretation: it has probably here its own usual sense of, other, different, and suggests a correction, not only in the meaning, but the reading of, *ápta*, which should be, not *ápta*, but, *átta*, for, *átman*, own. Mr. Prinsep quoting a passage cited by Mr. Turnour, in which, *sankhitto*, for, *sankshipta*, occurs, observes that, *pt*, is never, in the Girnar text, contracted to, *tt*, but is written at length, as in, *chaptára*, *ápta*, but this would be so utterly at variance with the practice of Pali writing, that the fact may be questioned: the form of the compound character, it is true, resembles that of, *pt*, more than that of, *tt*, but we cannot always depend upon the seeming forms of conjunct letters, and a character which is dubious, only perhaps from our imperfect acquaintance with the alphabet, is not of sufficient weight to countervail a fundamental rule of the Pali dialect,—the substitution of a double, *t*, for, *t* and any other consonant. I read therefore not, *apto*, or, *chaptaro*, but, *atto*, *chattáro*, and in the former case, with the advantage of providing for a natural contrast to, *para*, *átta pásaṇḍa*, one's own faith, *para pásaṇḍa*, the faith of

others. The object of the edict is then made obvious, and whilst it gives the preference to those who follow the faith of the king, it directs that reverence shall be shewn to all systems by which moral obligations are instilled.

There is another objection to Mr. Prinsep's rendering of the term *Pāsanda*, which he translates, unbelievers; the term, when it first occurs is in the neuter plural, *Pāsandāni*, and it cannot therefore be applied to person; it must denote, the thing, not the individual; the belief, not the believer: the same may be said of the following terms, *pavajitani* and *gharastāni*, which are also separated from the term, *pāsandāni*, by *cha*, and cannot therefore be rendered as the epithets, ascetic or domestic; they must be rather, the condition of mendicant and householder. Mr. Prinsep remarks, that the accusative, i, plural, has been written with *āni*, instead of *ān*; but as far as we know of Pali grammar, this can only be true in the neuter gender. *Pavajitāni* is intended for *pravrajitani*, from *pravrajita*, a wandering mendicant, more probably than as Mr. Prinsep supposes *Pravijitani*, those by whom their passions are subdued.

Mr. Prinsep's reading subjoins the letter, *na*, to *pujāyati*; when the word recurs in Mr. Westergaard's copy it appears to be, *ne*, but in either case its meaning is doubtful, unless it be conjoined with the following syllable, and read, *nena* for *anena*, by him. *Kiti*, which Mr. Prinsep supposes to be for, *kirtti*, glory, appears afterwards as *kinti*, which cannot be so identified, and it is not a very probable rendering in the first instance, for it does not appear what connexion can exist between *Piyadasī's* patronage of the *Pasandas*, and his own true glory, or as Prinsep translates, "not that the beloved of the gods deemeth offering or prayers to be of the same (value) with true glory." The following passage also can scarcely be borne out by the text. *Sāra vridhhi*, cannot denote, even paraphrastically, salvation. Instead of Prinsep's rendering I should prefer, subject however to considerable doubt, something to the following effect. The beloved of the gods, *Piyadasī* the king honours all religions, whether ascetic or domestic. He honours them with gifts and with worship of various kinds; but the beloved of the gods does not esteem gifts or honours so much as the increase of that which is essential: *vridhhi*, the increase; *sāra*, the essence (of religion;) meaning probably the discharge of moral obligations. The edict then proceeds: By (of) him the encouragement of the essentials of all religion is in various ways, but this is the root of it. We have the same doubtful words, *ya va chaguti* or *ohiguti*, or according to Westergaard, *ya va viguti*; either is questionable, but apparently not indispensable to the sense, as that may be

connected with what precedes, the root of the encouragement being this; that honor be given to his own faith, and that that of others be not reviled, nor treated with injuries, *apakaranamhi*: the word that follows, read by Prinsep, *lahaka*, is considered by him to be identical with *lápaka*, a speaker, a disputant; and he accordingly translates the passage as if it related to controversial discussion, which is more than doubtful. Again his reading of *tamhi-tamhi*, as one word, from *tama*, darkness, cannot be correct, as it is nothing more than the repetition of the pronoun; *tasmin tasmin*, agreeing with *pakarane*, *prakarane*, in this, and this manner; that is, "Let the reverence be shown in such and such a manner as is suited to the difference of belief, as when it is done in that manner it augments our own faith and benefits that of others."

The edict then proceeds: Whoever acts otherwise, *tadanthethá*, possibly for *tadanyathá karoti* injures his own religion and annoys that of others; *chhanoti*, Prinsep conjectures to be intended for *kshanoti*, what hurts or destroys, which is possibly correct. The text continues, without offering any great difficulty to give the following reading:—"who reverences his own faith and reviles that of another, saying, let all become of one faith, or let us spread the light of our faith, he only throws obstruction in the way of his own belief." There does not seem to be any reason for rendering, *bhatiyá*, by pecuniary consideration, for *blirityá* by hire, although it is not easy to propose any preferable interpretation. The following passage is also very perplexing, and although Prinsep's version, "such an act in his very breath and well being," cannot be the translation of *tasa maváyo eva sádhá*, it is not easy to guess what it implies. In the following, again, there is probably something wrong; Prinsep has it, "more-over hear ye the religion of the faithful and attend thereto;" understanding, apparently, *sunája* for *sruyatám*, "let it be heard," a change not possible. *Mána manhása*, he renders also *manyamánasya*, obedient, faithful, but if the initial letter could be got rid of, it were more probably, *anya anyasya*, of one another; while *sunája*, which is connected with *susunsera*, by the conjunction *cha*, must be a noun in the third case, possibly the instrumental of *sunati*, *sunatyá*, reverence, respect. Altogether I should be disposed to render the passage something like this, "of such a person the more beneficial course is by the discharge of mutual respect and service."

I am at a loss to understand upon what principle the next passage is rendered by Mr. Prinsep, "apparently such is the desire, the act, the hope of the beloved of the gods, that all unbelievers may speedily be purified and brought into contentment speedily." The beginning is

of course correct, "such is the wish of the beloved of the gods," but the rest cannot admit of the above version; he seems to have been led to it by supposing, *asu*, to be identical with, *ásu*, quickly; but even if the identification were correct, it would not justify the rendering, while it seems probable that it is not a particle but a verb, implying there are, or have been, as Prinsep has also suggested for *santi* or *santu*, from, *As*, to be, making, *ásu*, in the third person plural of the imperfect. There are also some remarkable words in this paragraph, which it is extraordinary that Mr. Prinsep should have overlooked, as they are those which are common to the religious books of the Brahmans and Buddhists, although applicable in an especial manner to the scriptural authorities of the latter, *Suta* and *agama*, meaning by the first, *Sutras*, fundamental rules, and by the second, any religious authorities. In the inscription it is said, that many *Pasandas*, have such authorities, and the passage indicates therefore, *Piyadasí's*, especial encouragement of those religions which depend upon written authorities, of the people of the book. The sentence, as I understand it, imports "in all religions there may be many scriptures, (*Sutras*) and many holy texts, (*Kalyanágama*) and such are to be maintained for their purity; or *pasannáte*, (*mé*), through (*my*) favour. We then have a repetition of the sentence which occurred earlier in the tablet, the order a little changed; "the beloved of the gods does not esteem gifts or reverence so much as encouragement of the essentials;" it is then added, and for this purpose various officers are appointed to exercise an inspection over all *Pásandas*: these are, *Dharma mahamátras*, regulators of morals. The next term is indistinct, Prinsep reads it, *Ithaijha*, which he derives from, *Ithairyya*, and renders it, "possessing fortitude of mind;" but as far as it is legible it is, *itthi*, for *strí*, a woman, and is connected with, *Mahamata*, as *Ithíya mahamatá*, denoting a different officer, perhaps one charged with the superintendence of the weaker sex.

The following is *vacha*, (for *vatsa*?) *bhumika*, "seats of tenderness," which Prinsep reads *vividha kámikas*, "practisers of every virtue," but being separated by *cha*, from what precedes, the words must signify some other functionaries; so also we have next, *ane cha níkáya*, and other officers, not congregations. The edict concludes: The advantage of this (measure) is the increase of our own faith and the lustre of moral duty. Prinsep makes these but one; for the increase of converts is the lustre of religion; but the employment of the conjunction, *cha*, repeated, clearly distinguishes them, although the use of one verb shows that the *vridhhi*, of the *átta pásanda*, and the enhancement of *Dharma*, is alike the object of the edict.

If this part of the edict has been rightly interpreted by the present proposed rendering, it is one of the most remarkable of the whole. It shows entire latitudinarianism in the author, not indifference perhaps to forms of religion, but strict impartiality, and a decided preference of moral over ritual; for the Sáravridhī, the increase of that which is spiritual, over either the, áttā, or para-pasanda, individual or different form of faith. What is considered to be essential, is clearly enough laid down in other edicts; reverence of gods, Brahmins, ascetics, elders, duty to parents, affection to children and friends, and general benevolence and humanity.

Proposed Translation.

The beloved of the gods King Priyadasi, honours all forms of religious faith, whether professed by ascetics or householders; he honours them with gifts and with manifold kinds of reverence; but the beloved of the gods considers no gift or honour so much as the increase of the substance (of religion): his encouragement of the increase of the substance of all religious belief is manifold. But the root of his (encouragement) is this: reverence for one's own faith, and no reviling nor injury of that of others. Let the reverence be shown in such and such a manner as is suited to the difference of belief; as when it is done in that manner it augments our own faith and benefits that of others. Who ever acts otherwise injures his own religion and wrongs that of others, for he who in some way honours his own religion and reviles that of others, saying, having extended to all our own belief, let us make it famous, he who does this throws

Mr. Prinsep's Translation.

"The heaven-beloved King Priyadasi propitiates all unbelievers, both of the ascetic and of the domestic classes; by charitable offerings, and by every species of puja doth he (strive to) propitiate them. Not that the beloved of the gods deemeth offerings or prayers to be of the same (value) with true glory. The promotion of his own salvation promoted in many ways, the salvation of all unbelievers of which indeed this is the root, and the whole substance.

"Again, the propitiation of the converted heretic, and the reproof of the unconverted heretic must not be (effected) by harsh treatment: but let those who enter into discussion (conciliate them) by restraint of their own passions, and by their mild address. By such and such conciliatory demeanour shall even the unconverted heretics be propitiated. And such conduct increaseth the number of converted heretics,

difficulties in the way of his own religion: this, his conduct, cannot be right. The duty of a person consists in respect and service of others. Such is the wish of the beloved of the gods; for in all forms of religion there may be many scriptures (Sutras) and many holy texts which are to be thereafter followed through my protection. The beloved of the gods considers no gift or reverence to be equal to the increase of the essence of religion; and as this is the object of all religions, with a view to its dissemination, superintendents of moral duty as well as over women, and officers of compassion as well as other officers (are appointed), and the fruit of this (regulation) will be the augmentation of our own faith, and the lustre of moral duty.

while it disposeth of the unconverted heretic, and effecteth a revolution of opinion in him. And (he) encourageth the converted heretic, while he disposeth completely of the unconverted heretic, whosoever propitiateth the converted heretic, or reproveth the unconverted heretic, by the pecuniary support of the converted heretic. And whoso, again, doth so, he purifieth in the most effectual manner the heretic; and of himself such an act is his very breath, and his well-being.

“Moreover ‘hear ye the religion of the faithful and attend thereto:’ even such is the desire, the act, the hope of the beloved of the gods, that all unbelievers may speedily be purified, and brought into contentment speedily.

“Furthermore from place to place this most gracious sentiment should be repeated: ‘The beloved of the gods doth not esteem either charitable offering or puja, as comparable with true glory. The increase of blessing to himself is as much (importance) to all unbelievers.’

“For this purpose have been spread abroad ministers of religion possessing fortitude of mind, and practices of every virtue: may the various congregations co-operate (with them) for the accomplishment therefore. For the increase of converts is indeed the lustre of religion.”

TABLET XIII.

K	'Tari? cha * * *	pañasa * * *	śita	ati a * * *	ya *
G a	(') * * *	* tasa	pasamatá	tatihatám	bahu
G b	* * *	patasa	pasamátam	etáhatam	baha

K	* * * * *	* * *	* * *	ga sapata	śi apa-
---	-----------	-------	-------	-----------	---------

G a	tivatá	kammata	tatá	pachhá	adháná ^ú	ladhesu	kalin-
G b	távata	kammata	tatá	pachhá	adhúná	ladhesu	kalin-

K	tati	tisati	? * * * * *	* * * * *
---	------	--------	-------------	-----------

G a	gesu	tí —	dhammaviyo	* * * *	vadho	va	marañam
G b	gesu	ti ve	dhammaváyo	* * * *	vadho	va	maranam

K	* *	*tutivi	na	janasha	dhamā	cha	ye	taram	radhi
G a	va	apaváho	va	janasata	—	—	—	—	—
G b	va	apaváho	va	janasata	—	—	—	—	—

K	lipa	badhasa	vadanasha	hata	dhanasariḍa	cha	ghusha
G a	—	bádhe	vedana	mata	—	cha	—
G b	—	bádham	vedana	mata	—	cha	—

K	mata	ganamata	—	devanam	piyasa	inam ?	cha	ma * *
G a	—	ganamata	cha	devá —	—	* * *	—	—
G b	—	ganamata	cha	devá —	—	* * *	—	—

K	sa	mata	hata	tara	na ?	me	satata	ha	* * vasati
---	----	------	------	------	------	----	--------	----	------------

G a	—	—	—	—	—	—	—	—	—
G b	—	—	—	—	—	—	—	—	—

K	bamanaka	śulakha	yaña	tapasha	cha	atavim	vayevati
---	----------	---------	------	---------	-----	--------	----------

G a	—	—	—	—	—	—	—
G b	—	—	—	—	—	—	—

K	hata	jasha	etam	bhoti	sususha	mata	pitri	shususha
G a	—	—	—	—	—	pá	mátá	pitari
G b	—	—	—	—	sa	mátá	pitari	susunsá

K	shusuri	tana	sususha	mitaristata	so	anya	*ñatiki	shu-
G a	guru	—	sususá	mitasustata ^{an}	sapiya	ñátike	pa-	—
G b	guru	—	susunsá	mitasanstata	saháya	ñátike	sa-	—

K dasa bhatikanam saga patipati su ? phaliti savatra bhati

G a dása * * * * * ' * * * * *

G b dása * * * * * * * * * *

K apagara va vadhi va abhoti tanaga jasu mapayasha

G a _____

G b _____

K api suti likhanam tasa atipa eva thara shamarisa

G a _____

G b _____

K sutasa aya ñati vavansana 'prapunati tatantam pitisha

G a — ya ñatiká vyasanam papunáti tata so pitesu^a

G b — ya ñatiká vyasanam papuhoti vata so pi tesa

K va upaghato pati anti bagavo sutrasa dama??? gavama

G a — upagháto patipatí bhage vesíya pa * * * * *

G b — upagháto patipati bhago vásá sava * * * * *

K cha devanam priyasa nasti iva bhavata prinam anja

G a * * * * * * yato násti manusánam ekataramhi —

G b * * * * * * yato násti manusánam ekataramhi —

K chha dana ga pasu oseyama tu sananda? kusti gaha

G a — pásandamhi — na náma pásáde yávatako * *

G b — pásandamhi — na náma pásáde yávatako jana

K vimoha cha chhatu para ? * * * 'sata bhagava sa-

G a tado — ' * * * * * na yasako — va mi-

G b tada — * * * * * na yasaka — va mi-

K hasra bhagam va asagatra devata devanam piyasa ye

G a taveyá vapi ataviyo _____

G b taveyá vapi ataviyo _____

K pachhae patiriyati mamitratiyati va devanam piyasa

G a _____

G b _____

K yasasa mama?? ya pitri eva ri devanam piyasa avati

G a _____ devánam pi* * yata^{sa}

G b _____ devánam pi* * pasa

K bhavati pi enadati ana * japiti atava pipitreña

G a ————— pi jite pati pita * * * * *

G b ————— pi jite pati * * * * *

K bhava 'devanam priyasa vachatiti sakiti eva khapayana

G a —————

G b —————

K ??? yasa ichhati hi devanam priye sava bhutanam ?chhati

G a ————— ' * * * * * sava bhutánam achhatá

G b ————— * * * * * sava bhútánam achhátim

K — sayama sama itiya va bhasiya ayotiya tasa niti

G a cha sayaman cha sama * * * * *

G b cha sayaman cha samam * * * * *

K viya devanam piyasa yo dhamavijayo se cha ??? di

G a — cháron cha madava cha * * * * *

G b — cherán cha mádava cha * * * * *

K devanam piyasa ???????? tisha 'sampapi yo janaśa?

G a —————

G b —————

K sanyatañ Antiyoko nama yona raja parancha tena

G a ° * * * * * * * * * * yona rája parancha tena

G b ° * * * * * * * * * * yona rája parancha tena

K Antiyokena chaturō |||| rajano Turanara nama An-

G a ————— chaptáro ——— rájáno Turamáyo cha An-

G b ————— chattáro ——— rájáno Turamáyo cha An-

K tikoua nama Mako nama Alikasunari nama likhichha

G a takana cha Magá cha * * * * * * * * *

G b takana cha Magá cha * * * * * * * * *

K thana jayavata anansa ye asa miti puna rajanti eva hi

G a * * * * *

G b * * * * *

K yona kati yasha ti bha? 'roja miti hi kite andhapaña

G a ————— idha^e parindesu

G b ————— idho parindesu

K jasha savatam devanam priyasa dhamanúsastim anu-
 G a — savata devánam piyasa dhammánusastim anu-
 G b — savata devánam piyasa dhammánusastim anu-

K vestariyatam pi devanam priyasa ua va ichhayantiti
 G a vatareyata pádati _____
 G b vatareyata pidúti _____

K písatama devanam piyasa dhama? vatamvi dhana??

G a

G b

K śama?? vidhiyati asti dhiya śavi iyesu atilatu
 G a _____ ¹⁰ * * * * * * * *
 G b _____ * * * * * * * *

K bhena bhoti savata vijayesu ? ¹⁰vijaye sati rase
 G a * * * * vijayo savathá puna vijayo píti raso
 G b * * * * vijayo savathá puna vijayo píti raso

K viladha bhosa priti — dhamaśiya hi ? ckatari sa
 G a sá ladhá sá píti hoti dhammavijayamhi _____
 G b sá ladhá sá píti hoti dhammavijayamhi _____

K me viparanti va me rama atilamesu devanam piyo

G a

G b

K etaye???? ayo dhame ? pi??? kiti prataga prito me
 G a _____ ¹¹ * * * * * * * *
 G b _____ * * * * * * * *

K tasa eva vijayo ya ma vijatavam ama cha samñako
 G a * * * * vijayam na vijetavyam mam ñasarasake
 G b * * * * vijayam má vijetavyam mam ñasarasake

K yo si yajati ???????? chaturō hi ya vijama cha
 G a eva vijayecchāti _____ cha * * _____
 G b eva vijayecchāti _____ cha * * _____

K ¹¹yo dhama vijasa va hi navam kiki param sasti

G a

G b

K kosi ra iti vati ko tu yaceha mata pasadhi iha
 G a ¹² * * * * * * * * * * * * * * i
 G b * * * * * * * * * * * * * * i

K lokika — paralokika —

G a lokiká cha páralokiká cha [* * * va sweto hasti sava

G b lokiká cha páralokihá cha [* * * va sweto hasti savá

G a loka sukhaharo náma]

G b loka sukhaparo náma]

TABLE XIII.

THE division of the Girnar inscriptions, numbered by Mr. Prinsep as 13, finds a counter part at Kapur di Giri; but unfortunately it is not of a nature to supply the defects and imperfections of the Girnar tablet. As mentioned by Mr. Prinsep, the rock at Girnar is at this part so much mutilated, that it is difficult to put together the context of the entire tablet: portions of the inscription are wanting at either end of each line, especially at the beginning, but the middle portions are tolerably perfect. The rock at Kapur di Giri has not apparently suffered much mutilation, and the inscription is consequently more complete, supplying the words effaced from that at Girnar; but it is not only in this respect that it exceeds in length the Girnar inscription. There are evidently additional passages which the latter does not contain, and which intervene between what are apparently intended for the same passages in both places; on the other hand, there are several obliterations or deficiencies in the Kapur di Giri inscription where that at Girnar is entire. In collating the two, therefore, wide gaps occur without a parallel, partly owing to these respective mutilations,—partly to the additional matter at Kapur di Giri. From place to place, however, concurrent passages do occur, which leave no doubt of the general identity of the inscriptions, as will appear from the collateral copy.

It happens, however, still unfortunately, that neither the additional nor those which are evidently identical passages in the Kapur di Giri inscription, are for the major part to be satisfactorily deciphered. The circumstances under which the characters were transcribed sufficiently account for the disappointment. Mr. Masson has explained the impossibility of taking a fac-simile of this part of the inscription, and he was obliged, after many fruitless efforts to effect his purpose, to be content with carrying off a copy only. But the position of the stone, which prevented a fac-simile from being made, was also obviously

unfavourable to the making of a faithful copy, and it is not at all therefore to be wondered at, that the forms of the letters should have assumed deceptive appearances, differing consequently in different parts of the inscription, in words which there is reason to believe to be the same, and varying from one another in words which from one or two distinct characters are known to be identical, as for instance in, *Devanam priya*, in which the latter term is generally legible, and we may therefore infer that, *devanam*, precedes it; but without such a guide it would be impossible to read, *devanam*, as it presents itself in a number of different and unusual forms. Mr. Masson's copy, however, is more legible than one made by a native employed by M. Court the use of which has been kindly allowed to the Society by Professor Lassen. In this, very few words can be made out even by conjecture, and with the assistance of Mr. Masson's transcript. It has not, however, been wholly unserviceable.

Mr. Prinsep has ventured to propose a continuous translation of the Thirteenth Tablet, although he admits that insulated phrases alone are intelligible. Such is the case in the Kapur di Giri inscription; and it were very unsafe to propose anything like a connected rendering even of what is perfect, although a few words and phrases are decipherable, and may be compared with similar words and phrases in the Girnar tablet. In most of these passages, however, the reading of the original itself is conjectural only, for it will follow from the sources of imperfection described, that although a transcript has been attempted as above in Roman characters, yet no great reliance is to be placed on the greater part of it, particularly where parallel passages are not found in the Girnar inscription.

One word only can be identified in the opening of the two inscriptions, *pañasa* for *patasa*, the meaning of neither of which is satisfactory. Blank or indistinct letters follow at Kapur di Giri, so that we have no similar terms with those which occur at Girnar, and which Mr. Prinsep reads, *pasamatá tatihatám*, &c., readings which are rendered doubtful by Mr. Westergaard's copy. We have nothing corresponding with, *kalingesu*, supposed by Mr. Prinsep to refer to the Kalinga provinces, &c., to which he adds, "not to be obtained by wealth;" *adhanáladesu*, for which Mr. Westergaard has, *adhúná ladhesu*, which might be rendered, now, or recently acquired. His *dhamma viyo*, which he renders, decline of religion, Mr. Westergaard reads, *dhammaváyo*; the sense of both is equally doubtful, the word, *viyo*, being of uncertain purport, as noticed by Mr. Prinsep, (vi. 586), where it occurs singly in a passage in one of the Lát inscriptions; a like compound, *viyo dhamma*, is rendered by Mr. Tur-

nour, perishable things (vi. 623), but it may possibly be intended for, vyaya, waste, expenditure. The two copies agree in reading, vadho va maranam va apaváho va, but these words can scarcely mean murder and death, and the unrestrained license of mankind, especially as the last term appears to be, janasata, a good man, not janasa, the genitive case. We have however at Kapur di Giri, janasha, though none of the preceding. The following words partly agree, but there is no making sense of them till we come to, devanam priyasa, of which at Girnar we have, deva, only. This is followed by a series of questionable syllables at Kapur di Giri, unknown to the Girnar tablet, but which apparently refer to Brahmanical rites, bamanaka sulakha, to sacrifice, yajna, ascetic penance, tapasha, and dwelling in the forests, atavim; and possibly recommends that reverence should be paid to those who observe such practices, jasha etam bhoti súsusha (for yasya etadbhutasya súsrúsá). In recommending what follows both inscriptions agree; service or duty to mother, father, friends, kindred, servants, and masters. In place of padása, Girnar *b* reads sudása, which the Kapur di Giri inscription confirms.

We have then again a passage with which there is nothing to correspond at Girnar, the purport of which, without help from such a collateral source it is not easy to conjecture; a few words may be guessed at as, yasha, fame, or, yasa, of whom; suti likhanam, which will admit of, writing of the Srutí or Veda; and sutasa, which may here be intended possibly for, sutrasya, a rule or precept. The words that follow nearly agree, ñátina vavansana prapunati; but they cannot be rendered without great uncertainty, cleanse away the calamities of generation.

We have several legible words in what follow, more or less concurrent with those of Girnar; where the latter reads, bhagovesa, according to Prinsep, bhago vesiya, we have what appears to be Baghavo, which if correct, may be intended for Bhagaván, a divinity, sometimes applied to Buddha; but the Girnar readings leave this doubtful. In the passages that follow, again, we may detect a few similar words, but the Kapur di Giri inscription has much additional matter here, and, Devanam priyasa, is repeated six times for once that it occurs at Girnar. Sava bhutánam, of all creatures, is common to both, but the, achhatá or achhátim, of Girnar, appears to be, ichhatí, he wishes, at Kapur di Giri.

Deficiencies at the end of, the seventh and beginning of line eight, at Girnar, are rather more than adequately filled up at Kapur di Giri, and some of the additional matter is important. The name and

designation, Antiyoka nama yona Raja, are given distinctly: why he is introduced does not very well appear, but we might venture to connect it with what precedes, and to interpret and fill up the passages thus: He who had obtained the alliance of men—he has been received as the friend of (me) Devanampriya: we have for this conjectural rendering, Devanam priyasa, then some unreadable letters. sampapi, (for samaprāpi) yo janasa (su) sanyatam. At Girnar we have only, yona Raja, but no name, no Antiochus, nor any circumstance relating to him. Both inscriptions next read, parancha, and afterwards; the Girnar has then, tena, by him, which as no name was specified, Mr. Prinsep necessarily interpreted, by whom, (rather by him) the Greek king: in the Kapur di Giri tablet, tena, refers of course to Antiochus, but not to leave any doubt on this score, the inscription repeats the name, and gives us, tena Antiyokena, by that Antiochus; thus furnishing a very important illustration of the Girnar tablet. What then was done by him? by that Antiochus? this is not to be made out very distinctly, but connected with what follows, it may be conjectured to imply that four other Greek princes were brought under subjection by him. There can be no doubt that the numeral which Mr. Prinsep read, chaptaro, is properly, chattáro. There is no, p, in the Kapur di Giri inscription, it is clearly, chataro, with the usual disregard of correct orthography and identification of long and short vowels. In the Girnar inscription the form is like, pt, no doubt, but this combination, as already observed treating of Tablet XII., is so utterly repugnant to the most characteristic feature of Pali, that it cannot be allowed; and in this case, if the original word intended be the Sanskrit numeral chatwára, the p would be gratuitously inserted. The only admissible reading is, chattáro, the regular Pali form of the Sanskrit, chatwára: four indistinct marks follow the numeral in each inscription, being probably intended for figures equivalent to four. We then have the several names of the four princes remarkably distinct, and it luckily happens that M. Court's copy is also very legible in this passage, and entirely confirms Mr. Masson's readings. The passage runs thus: Turamara nama, Antikona nama, Mako nama, Alikasunari nama. At Girnar the last name is wanting, there being some letters obliterated. We have also some variation in the reading, but not material, the names being there, Turamáyo cha, Antakana cha, Magá cha. The two inscriptions give us no doubt the names of four Greek princes, of whom, Ptolemy, Antigonus, and Magas may be readily recognised, although, how they come into juxta-position with Antiochus on the one hand, or Alexander, on the other, is only to be explained,

by the supposition, that although these names had from their celebrity reached the west of India, the history of the persons so named was vaguely and incorrectly known.

We shall however recur to the subject: at present we are only concerned with the purport of the inscription, which is unfortunately by no means distinct. We have the order, by that Antiochus four Yavana kings, were;—what? neither inscription enables us to answer: the Girnar inscription being in fact here mutilated. Mr. Prinsep, in his introductory remarks, supplying the connexion conjecturally, fills up the blank by reading, “And the Greek king besides, by whom the four kings have been induced to permit,” but there is nothing to warrant such a translation; and in the actual rendering of the passage, (p. 261) the latter clause is omitted: we there have, “and the Greek king, besides, by whom the kings of Egypt, Ptolemaios, Antigonos, (?) and Magas, &c., and then follows a blank. The Kapur di Giri inscription, although entire, presents characters of undetermined value, and probable inaccuracies. The first term, *likhichha thana*, is very doubtful; the next appears to be, *jayavata*, which might be rendered victorious, in the instrumental case, agreeing with, *Antiyokena*; *anansa*, is doubtful, both as to reading and sense; *ye asa miti puna rajanti*, might be rendered, “they who (the kings) become his friends, again shine (or enjoy dominion).” We may also render, *eva hi yona kati yasha*, “such, indeed, is the, Yavaná, become, of whom;” there then follow some indistinct characters, and the phrase seems to terminate with, *miti hi kite*, “friendship or alliance has been made.” This I admit is very conjectural, and a corrected copy or a better founded interpretation of the original may show it to be wholly erroneous; but in the present state of the inscriptions we may hazard the conjecture, that the purport of the whole passage may be, that the four princes after being overthrown by Antiochus, had been reconciled to him, and that an alliance had then been formed between him and the Indian prince Devapriya. There is nothing whatever to justify the supposition that Devapriya had attempted to make converts of the Greek princes, or to disseminate the doctrines and practices of Buddhism in their dominions.

We have some apparent correspondence between the inscription in the next passages, referring to the moral laws promulgated by Devapriya, but they do not give the sense Mr. Prinsep attaches to those at Girnar: the correspondence is only for a few words, and a long passage ensues, to which there is nothing parallel at Girnar after allowing for a partial mutilation. We can only render the last words, “is not everywhere in victories;” a few words again agree, in

which the term, vijaya, occurs, and which, at Girnar at least, winds up with what may be rendered, although pleasure may be derived from conquest, yet the best pleasure abides in the triumph of virtue. Apparently we then have at Kapur di Giri, the name of the prince as usual, and the moral edict, aya dhama (li)pi: next come, vijaya ya ma vijatavam, victory is not to be conquered, for the vijayam má vijetavyam, of Girnar; the latter is however here mutilated and presents other omissions, so that the two cannot be compared; both end alike, iha, or, i lokika (cha) pára lokika (cha), "in this world and in the next;" preceded at Kapur di Giri by, what appears to be, yaccha mata pasadhi, "which opinion is celebrated." There is nothing that corresponds with what appears to be a supplementary addition to the inscription at Girnar.

The state of this transcript of the Kapur di Giri inscription is very far from satisfactory, while from the names it records, it appears to be of great historical value. It would be very desirable to have a facsimile carefully taken, and as the part of the country in which it is situated is now within the reach of British influence, it might now be possible, perhaps, without much difficulty, to have such a copy. In the Journal of the Asiatic Society of Bengal for February, 1848, Captain Cunningham mentions in his Diary, his having visited the spot and taken a copy of the most legible portion of the inscription; he adds, however, that a proper copy could only be made by levelling the ground and building up platforms, and by white-washing the surface of the rock to bring out the sunken letters: a work of time, but which would well repay the labour¹. The translation of Mr. Prinsep is subjoined for the sake of reference, but I cannot venture to propose any connected version.

Mr. Prinsep's Translation.

.....Whose equality, and exertion towards that object, exceeding activity, judicious conduct afterwards in the *Kalinga* provinces not to be obtained by wealth the decline of religion, murder, and death, and unrestrained license of mankind; when flourished the (precious maxims) of *Devánampiyo*, comprising the

¹ Correspondence of the Commissioners deputed to the Tibetan frontier. In the number of the Journal of the Bengal Asiatic Society for January last, a paper by Mr. Laidlay, is announced on Edicts of Asoka, found by Captain Cunningham near Shali-baz-ghari, from which we may infer that a fresh transcript has been sent to the Society.

essence of learning and of science:—dutiful service to mother and father; dutiful service to spiritual teachers: the love of friend and child; (charity) to kinsfolk, to servants (to Brahmans and Sramans, &c., which) cleanse away the calamities of generations: further also in these things unceasing perseverance is fame. There is not in either class of the heretics of men, not, so to say, a procedure marked by such grace, nor so glorious nor friendly, nor even so extremely liberal as *Devānampīyo's* injunction for the non-injury, and content of living creatures and the Greek King besides, by whom the Kings of Egypt, PROLEMAIOS and ANTIGONOS, (?) and MAGAS, both here and in foreign (countries), everywhere the religious ordinances of *Devānampīyo* effect conversion, wherever they go; conquest is of every description: but further the conquest which bringeth joy springing from pleasant emotions, becometh joy itself; the victory of virtue is happiness: the victory of happiness is not to be overcome, that which essentially possesses a pledge of happiness,—such victory is desired in things of this world and things of the next world!

And this place is named the WHITE ELEPHANT, conferring pleasure on all the world.

TABLET XIV.

K	¹² Aya	dhmalipi	devanam	piyaśina	————	raña
G a	Ayam	dhāmmalipī	devānam	piyena	Piyadasinā	ráñā
G b	Ayam	dhāmmalipī	devānam	piyena	Piyadasinā	ráñā
K	likhasati	eva	asati	teti	likhina	asti yo vistivida?
G a	^c likhápítá	asti	eva	^s sankhitena	asti	majhamena asti
G b	lekhpítá	asti	eva	sankhitena	asti	majhamena asti
K	cha	savatasa	sasti	gapasama	apakivati	likhitena —
G a	vistatena	nava	savam	pavata	ghatitam	^{ch} mahálake pa-
G b	vistatena	nacha	savam	pavata	ghatitam	mahálake pi-
K	————	cha	likhi,	?? me ??	śame	hi va
G a	vijitam	bahu	cha	likhitam	likhápoyisam	cheva asti
G b	vijitam	bahu	cha	likhitam	likhápoyisam	chema asti

K	agatitam	va	punapuna	apiti	tasa	tasa	yajasa	ma-
G a	cha	etakam	'punapana	vútam	tasa	tasa	athasa	má-
G b	cha	etakam	punapuna	vutam	tasa	tasa	athasa	má-

K	dhiriyaye	va	*	*	*	*	¹³ pavijayati	tasa	sava
G a	dhúritáya	katá	jano	tathá			patipajetha	¹⁴ tata	ekadá
G b	dhúritáya	kiti	jano	tathá			patipajetha	tata	ekadá

K	avati	hi	asamasa	li??	śavasin	khatika	va
G a	—		asamátam	likhitam	asadsam	cha	sachháya
G b	—		asamátam	likhitam	asadsam	cha	sachháya

K	?	?	?	?	ichhati	lipikitam	eva	apandanena	—
G a	káraṇam	cha	^{alo}	^{ptá}	^{Relachepu}	lipikará		^{radhena}	cha
G b	káraṇam	va	alovettá		lipikará			paradhena	va

TABLET XIV.

CONTINUOUS with the inscription which corresponds with No. 13 at Girnar, we have a portion that presents a like identity with that numbered 14. The commencement is clearly the same; this moral edict has been caused to be written by the beloved of the gods; with a difference of name, which is here Piyasi. An exact agreement does not seem to continue; although it is not impossible that a more correct transcript might restore the concurrence more completely. In some instances, we have obviously the same combination intended as, *tasa tasa yajasa madhiriyaye*, should no doubt be as at Girnar, *tasa tasa athasa madhuritáya*, "through the pleasantness of this meaning." There does not appear to be anything agreeing with what Mr. Prinsep conjectures to be the name of the Pundit by whom the inscription was composed; and M. Westergaard's reading instead of, *Rela chepu lipi kará pandithena cha*, is, *Aovetta lipikará paradheua cha*, while at Kapur di Giri we have merely, *lipi kitam eva apandanena*: what either implies, I cannot pretend to interpret.

CONCLUDING OBSERVATIONS.

THE inscriptions on the rocks of Girnar, Dhauli, and Kapur di Giri, and on the columns of Delhi, Allahabad, Mathia, and Bakra, form two classes of inscriptions, the general style and purport of both of which are essentially the same, while there is a close agreement

between the individual members of each class. They are documents of singular interest from their antiquity, the illustration which they afford of the written language of India at a distant era, and from the light they cast upon the state of society, and the doctrines then either prevalent or in progress. They offer also some illustration of the political history of the country, although less than we might have expected or may desire. Even with respect to the subjects to which they evidently relate, they are less satisfactory than could be wished, and except with certain qualifications and within probable limits, they leave us very uncertain as to the conclusions which may be safely drawn from them, and very much in the dark as to the objects for which they were made public, the time at which they were sculptured, and the prince by whose orders they were promulgated. On all these points many doubts and difficulties are suggested by the inscriptions themselves, as far as their interpretation may yet be relied on, the solution of which is likely to require still more careful and competent investigation.

According to the late Mr. James Prinsep, the original decipherer of all these inscriptions, the documents in question are royal edicts, the essential objects of which were the establishment and propagation of the precepts of the Buddhist religion throughout India, and through the adjacent parts of Persia and Khorasan, which were then subject to the Seleucidan princes. These edicts were issued by Asoka, the grandson of Chandragupta, who was contemporary with Antiochus the Great, and who having become a convert to Buddhism early in his reign, engaged with the zeal of a proselyte, and the munificence of a monarch, in projects for its propagation. These deductions have been worked out by Mr. Prinsep from his translations of the inscriptions with remarkable acuteness, with most meritorious carefulness and labour, and with very extensive research, and they have received the ready acquiescence of many of the most distinguished oriental scholars. In the main they may possibly be correct; but the interpretation, as we have seen, is sometimes disputable, and the meaning appears to have been imperfectly or inaccurately rendered in various instances; the language of the inscriptions, even where satisfactorily readable, is often very perplexing, owing partly to its peculiar structure, and as it must be admitted, in a still greater degree to our imperfect knowledge of it; and it is frequently of questionable decipherment in consequence of the indistinctness, the occasional deficiencies, and possible ignorance of the original inscribers. The historical facts asserted of the supposed originator of the edicts, rest upon grounds that are not of an indisputably authentic character, and that are irreconcilable

with those we derive from other sources of information; and these considerations may naturally make us hesitate before we assent to the conclusions which have hitherto been considered as established, or recognise them as no further liable to investigation.

In the first place, then, with respect to the supposed main purport of the inscription, proselytism to the Buddhist religion, it may not unreasonably be doubted if they were made public with any such design, and whether they have any connexion with Buddhism at all. In favour of the supposition, it is argued, first, that the prince who assumes the credit of being the promulgator, and who names himself, Priya, or Piyadasi, was the same with Asoka, who, according to the traditions of the Buddhists, was a zealous promoter of their faith, and issued, according to one statement, 84,000 precepts, or according to another, erected as many monuments, vihars, chaityas, and sthúpas, monasteries, temples, and topes, in its honour, and for its propagation; and secondly, that the language of the inscriptions is evidence of a similar intention. The identity of Asoka and Piyadasi, I shall subsequently advert to. The meaning of the language of the inscriptions is, to say the least, equivocal.

The language itself is a kind of Pali, offering for the greater portion of the words forms analogous to those which are modelled by the rules of the Pali grammar still in use. There are, however, many differences, some of which arise from a closer adherence to Sanskrit, others from possible local peculiarities, indicating a yet unsettled state of the language. It is observed by Mr. Prinsep, when speaking of the Lát inscriptions, "The language differs from every existing written idiom, and is as it were intermediate between the Sanskrit and the Pali." The nouns and particles in general follow the Pali structure; the verbs are more frequently nearer to the Sanskrit forms; but in neither, any more than in grammatical Pali, is there any great dissimilarity from Sanskrit. It is curious that the Kapur di Giri inscription departs less from the Sanskrit than the others, retaining some compound consonants, as *pr* in *priya* instead of *Piya*; and having the representatives of the three sibilants of the Devanagari alphabet, while the others, as in Pali, have but one sibilant: on the other hand, the Kapur di Giri inscription omits the vowels to a much greater extent, and rarely distinguishes between the long and short vowels, peculiarities perhaps not unconnected with the Semitic character of its alphabet.

The exact determination of the differences and agreements of the inscriptions with Pali on the one hand, and Sanskrit on the other, would require a laborious analysis of the whole, and would be

scarcely worth the pains, as the differences from either would, no doubt, prove to be comparatively few and unimportant, and we may be content to consider the language as Pali, not yet perfected in its grammatical structure, and deviating in no important respect from Sanskrit. Pali is the language of the writings of the Buddhists of Ava, Siam, and Ceylon; therefore it is concluded it was the language of the Buddhists of Upper India, when the inscriptions were engraved, and consequently they are of Buddhist origin. This, however, admits of question; for although the Buddhist authorities assert that Sakya Sinha and his successors taught in Pali, and that a Pali grammar was compiled in his day; yet, on the other hand they affirm, that the doctrines of Buddha were long taught orally only, and were not committed to writing for four centuries after his death, or until B.C. 153, a date, no doubt, subsequent to that of the inscriptions. In fact, the principal authorities of the Cingalese Buddhists appear to have existed in Cingalese, and to have been translated into Pali only in the fifth century after Christ.

According to M. Burnouf and Mr. Hodgson, the earliest Buddhist writings were not Pali but Sanskrit, and they were translated by the Northern Buddhists into their own languages, Mongol and Tibetan. It does not appear that they have any Pali books. The Chinese have obtained their writings from both quarters, and they probably have Pali works brought from Ava or Ceylon. They have also, according to M. Burnouf, translations of the same Sanskrit works that are known in the North. It is by no means established, therefore, that Pali was the sacred language of the Buddhists at the period of the inscriptions, and its use constitutes no conclusive proof of their Buddhist origin. It seems more likely that it was adopted as being the spoken language of that part of India where Piyadasi resided, and was selected for his edicts, that they might be intelligible to the people. Hence, also, the employment of different alphabets, that of Kapur di Giri being the alphabet current in Afghanistan and Bactria, as we know from the Græco-Bactrian coins. The use of the provincial or local alphabet was evidently designed for the convenience of those to whom it was familiar, while the ancient form of the Devanagari was that employed in Hindustan as being there in general use. The popular currency of the language, admitting that it might have been the spoken dialect of the north-west of India, would be more likely to prevent, than to recommend its use as a 'sacred' language, and its being applied to such a purpose by the Southern Buddhists was in some degree probably owing to their being as a people ignorant of it, and it would then assume in their eyes a sanc-

tity which as a spoken dialect it was not likely to possess. At the same time, we can scarcely suppose that the language of the inscriptions was understood in all the countries where they have been discovered, beyond the Indus, at Delhi, in Behar, in Orissa, and Guzerat, where we know that very different dialects, however largely borrowing from a common source, at present prevail. Neither is it likely that edicts intended to regulate the moral conduct of the people at large should have been intelligible only to Buddhist priests, or should have been perpetuated on pillars and rocks solely for their edification. We may therefore recognise it as an actually existent form of speech in some part of India, and might admit the testimony of its origin given by the Buddhists themselves, by whom it is always identified with the language of Magadha or Behar¹, the scene of Sakya Sinha's first teaching; but that there are several differences between it and the Mágadhi, as laid down in Prakrit grammars, and as it occurs in Jain writings. It is, as Messrs. Burnouf and Lassen remark, still nearer to Sanskrit², and may have prevailed more to the north than Behar, or in the upper part of the Doab, and in the Punjab, being more analogous to the Sauraseni dialect, the language of Mathura and Delhi, although not differing from the dialect of Behar to such an extent as not to be intelligible to those to whom Sakya and his successors addressed themselves. The language of the inscriptions, then, although necessarily that of their date, and probably that in which the first propagators of Buddhism expounded their doctrines, seems to have been rather the spoken language of the people in Upper India, than a form of speech peculiar to a class of religionists, or a sacred language, and its use in the edicts of Piṇḍasi, although not incompatible with their Buddhist origin, cannot be accepted as a conclusive proof that they originated from any peculiar form of religious belief³.

There is nothing in the injunctions promulgated or sentiments expressed in the inscriptions in the sense in which I have suggested their interpretation, that is decidedly and exclusively characteristic of Buddhism. The main object of the first appears, it is true, to be a prohibition of destroying animal life, but it is a mistake to ascribe the doctrine to the Buddhists alone. Whatever may have been the cause, and it is not unlikely that the progress of Buddhism may have exercised some influence in popularising the notion, the Brahmans adopted

¹ Turnour's Introduction to the Mahawanso, xxii, *Sá Mágadhi mula bhása.*

² *Essai sur le Pali*, p. 187, "La Palie était presque identique à l'idiome sacré des Brahmanes, parce qu'elle en dérivait immédiatement."

³ Pali, means, original text, regularity.—Maha. Introd. xxii.

and enforced it equally at an early period, and declared tenderness for living creatures to be the first of duties. Ahinsá parama dharma, tenderness is the supreme merit, is the language of Manu, and the Mahábhárata repeats the same text, and adds that "it is best devotion, supreme truth, the most precious of gifts, the best friend of man, the highest happiness, the best Veda. Whatever gifts may have been offered at sacrifices or ablutions performed in sacred streams are inferior in their consequences to tenderness of animal life,—such are its virtues that they could not be enumerated in a hundred years¹.

No doubt can be entertained of the purport of, Ahinsá, not only from its literal meaning, and its being described as that sentiment which looks upon living beings as upon ourselves, but from the association along with its eulogy of the merits of abstaining wholly from eating flesh, which the great and eternal Rishis, it is said, have declared to

¹ The merits of, Ahinsa, are cursorily mentioned in very many passages in the Mahabharata, but there is a panegyric in particular upon it, and the non-eating of flesh, in the Anusásana Parva.—Printed Edition, vol. iv., l. 5654 to 5722. The following are a few of the expressions.

अहिंसा परमो धर्मस्तथा ऽ हिंसा परन्तपः ।

अहिंसा परमं सत्यं यतो धर्मः प्रवर्तते ॥ and again

अहिंसा परमो धर्मस्तथा ऽ हिंसा परो दमः ।

अहिंसा परमं दानमहिंसा परमं तपः ॥

अहिंसा परमो यज्ञस्त्वहिंसा परमं बलं ।

अहिंसा परमं मित्रमहिंसा परमं सुखं ॥

अहिंसा परमं सत्यमहिंसा परमं श्रुतं ।

सर्वयज्ञेषु वा दानं सर्वतीर्थेषु चाश्रुतं ॥

सर्वदानफलञ्चापि नैतत्तुल्यमहिंसया ।

अहिंसस्य तपो ऽ क्षयमहिंसो यजते सदा ॥

अहिंसः सर्वभूतानाम् यथा माता यथा पिता ।

एतत् फलमहिंसाया भूयश्च कुरुपुङ्गव ।

न हि शक्या गुणा वक्तुमपि वर्षशतैरपि ॥

be the certain source of blessings—of wealth, of fame, of life, and of heaven'. The prohibition of destroying living creatures would not therefore be conclusive evidence of a Buddhist origin, even if it were more positively and distinctly enunciated ; but as already remarked, the language of the inscription is far from being satisfactorily interpreted, and the prohibition appears in strange contradiction with what appears to be, if it is rightly understood, the practice of the Royal kitchen, in which thousands of animals were slaughtered daily. So far also from the eating of flesh being utterly reprehended, a subsequent passage, as I have proposed to render it, seems to authorise an admission that the eating of animals for good purposes is not objectionable ; as remarked also by Mr. Prinsep on the inscription on the south face of the Láts, which prohibited the death of certain animals, or of some at particular days, the use of animal food is not absolutely interdicted,—on the contrary, he remarks that the goat, sheep, and pig, are expressly mentioned as kept for fattening, and are only not to be slaughtered while with young, or giving milk. Eating animal food is in fact common among the Buddhist nations of the present day, and its prohibition therefore, even if more clearly enjoined, would be no incontrovertible proof of Buddhist dictation.

Again, we cannot look upon the provisions of the second edict—even if they did include medicaments for animals and men, which is at least questionable, as containing anything exclusively Buddhist. Digging wells, planting trees, constructing resting-places for travellers, are quite as meritorious in the eyes of the Brahmanical, as in those of the Buddhistical Hindus. The same may be said of the injunctions in other edicts, to shew due reverence and affection to parents, teachers, children, and dependants. Numerous parallel passages may be found in Brahmanical writings, as essential parts of duty, or Dharma.

To these inconclusive evidences of Buddhism we have to oppose negative indications of a less equivocal character. Of this description is the total omission of any allusion to Buddha himself by any of his appellations, Sugata, Tathágata, Gautama, Sákya, or Sakyasinha, all which occur repeatedly in the Buddhist writings, both of Tibet and of Ceylon, and which the Sarnath Buddhist inscription proves it was not unusual to allude to in the sculptured inscriptions of that

¹ धन्यं यश्चस्वमायुष्यं स्वर्ग्यं स्वस्थयनं महत् ।

मांसस्याभक्षणम् प्राहुर्नियताः परमर्षयः ॥

religion. Neither is there any allusion to his family, or to any of his early disciples, or to any of the Bodhisattvas, who are sufficiently conspicuous in the *Kah-gyur* and *Mahawanso*, nor does any hint occur of *Sthúpas*, *Viháras*, or *Chaityas*, or of the *Bodhi*, or *Bo tree*,—everywhere else so frequently adverted to. Neither do we find anything that can be regarded as peculiarly Buddhist doctrines, for the moral duties inculcated are the same that are enjoined by Brahmanical writings, and there is at least one duty enforced which it is very difficult to reconcile with the spirit of Buddhism; reverence for, or rather the service of (*Susrusha*) the Brahmins. Now one great object of *Sákyasinha's* reformation was the subversion of the authority of the Brahmins, and it were utterly inconsistent with that object to hold up their service as one of the most weighty of moral obligations. The same service, it is true, is to be paid to the *Sramanas*, who are usually understood to be Buddhist ascetics,—or at least disciples of Buddha. In the, *Asoka avalána*, *Sramanas* are called the Sons of *Sákya*—but they are reproached with sitting on carpets and broad seats, and are therefore questionable ascetics. The term, however, means ascetic in general, one who endures fatigue or privation, and there might be Brahmana *Sramanas* as well as Buddhist *Sramanas*. Buddhist ascetics are also more commonly designated *Bhikhus*, mendicants, and Buddha himself is often termed *Maha-Bhikhu*,—a word that never occurs in the inscriptions. However, we may be content to accept *Sramana* as commonly understood,—and to regard the passage as intending both Brahmins and Buddhist ascetics, putting them upon a footing of equal sanctity. On the Girnar rock and the *Láts*, the Brahmins have precedence, and the term is, *Bahmana-samana*. In *Cuttack*, and at *Kapur di Giri*, we have the order reversed, *Samana-báhmána*. At the same time this objection is not altogether fatal to the Buddhist tenor of the inscription, as it appears that the phrase, *Sramana-brahmana*, is not unfrequent in the Buddhist *Sutras*, which are among their fundamental authorities—but although mentioned together it does not appear that they are thus associated as equally entitled to veneration. They are merely enumerated among the objects of the knowledge of Buddha, who is described as knowing all creatures, including *Sramanas* and *Brahmanas*. In so far, therefore, as the *service* of the Brahmins is enjoined, the injunction can scarcely be regarded as consistent with Buddhism.

It may be granted, however, that *Piyadasi* intended to enjoin equal reverence to Brahmins and to Buddhist teachers, for such a purpose would be not incompatible with that spirit of unqualified toleration which seems to have been one of his principal objects. I

have already endeavoured to shew that edict, No. 12, in particular, exhibits this intention most unequivocally, and that the prince enjoins in it no attempt at conversion, but universal respect for all forms of religious belief,—his own as well as any other *Páshanda*. The term, *Páshanda*, I may here add, although rendered heresy or heretic, does not bear properly so restricted a meaning. According to the annotators on the vocabulary of Amara Sinha in voce, it applies to external conformity with the Vedas, although neglecting their observances. The only synonyme is *Sarva-lingi*, one who wears the marks of all, that is, who assumes the staff, water-pot, girdle, and cord of the three first classes. One commentator explains, *Sarva*, by its synonyme, *Siva*, and makes the *Páshandas*, *Saivas*, but the best explanation seems that quoted from an early scholiast, *Vyári*, who says it includes the *Sánkhyas*, the *Sábdikas*, or logicians, and the *Vedántis*, or the three chief philosophical schools, the *Saivas*, the naked ascetics, or *Nagnas*, and the *Bauddhas*, all, in short, who do not regard the authority of the Vedas as infallible and divine, and who draw from them doctrines which tend to set aside the necessity of mere formal ceremonies,—and this, in fact, appears to be the main object of all the edicts, whether on the rocks or on the pillars,—the exaltation over all ceremonial practices, over a religion of rites, of the observance of moral obligations; the enjoining in preference to the sacrifice of animals, obedience to parents, affection for children, friends, and dependants, reverence for elders, *Sramans* and *Brahmans*, universal benevolence, and unreserved toleration. These are evidently the principal objects of *Raja Piyadasi's* enactments, and are no more compatible with exclusive Buddhism than with exclusive Brahmanism. They cannot be regarded as wholly peculiar to either, although it is very possible that like the same doctrines plentifully scattered through the *Sánti* and, *Anusásana Parvas* of the *Mahabharata*, they may have been suggested by the teaching of the early Buddhists, and originated in an attempt to effect a sort of compromise between the two religions before any active hostility had commenced, while the Brahmanism of the Vedas was yet in the ascendancy, although Buddhism was beginning to assail its pretensions to exclusive predominance. It is remarked by M. Burnouf, that in the early Buddhist writings, very little difference appears between the Buddhists and *Brahmans*, and *Buddha* is often described as followed by a crowd of *Brahmans* as well as *Bhikhus* and *Sramans*. The edicts may be taken as historical evidence that Buddhism was not yet fully established, and that *Piyadasi* was desirous of keeping peace between it and its predecessor by inculcating social duties and universal toleration in place of either ritual or dogma.

An argument in favour of the Buddhist character of the inscriptions has been deduced from the asserted identity of the Raja Piyadasi with Asoka, the grandson of Chandragupta, Raja of Magadhá, and with the latter's conversion to Buddhism according to Buddhist tradition, and his munificent patronage of its professors, and construction of innumerable monasteries, temples, Sthúpas, and columns in its honour. The identification rests upon a passage in the *Dípawanso*, a work of rather doubtful character, being supposed by Mr. Turnour to be properly termed *Maháwanso*;—although not the same as that which he translated. He conceives it to be older than the *Maháwanso* of Buddhaghosha, but it is not of a very remote antiquity, as it comes down to the end of the reign of Mahasena of Ceylon, A.D. 302, being a work of the fourth century. Mr. Turnour had but one copy of it, which was procured from Ava, in a very imperfect condition. As far as it can be received as authority, it no doubt is warrant for the identification,—stating that Piyadassano, (better Pali than Piyadasi) was inaugurated 218 years after the death of Buddha: at his inauguration many preternatural manifestations took place. The date here assigned to Piyadassano's inauguration is the same as that which is specified as the date of the inauguration of Asoka, and therefore leaves no doubt of the intention of the writer. Other circumstances are related in connexion with this passage, which are told of Asoka by name,—as his being the son of Bindusáro, and grandson of Chandagutto, his government of Ujjayin before he succeeded to the throne of Pátaliputra, and his begetting Mahindo, who became a great saint, and carried Buddhism into Ceylon, the main object of the *Dípawanso* being, according to Mr. Turnour, the record of the succession of Buddhist teachers, in which, he says, it is full of chronological mistakes. Without withholding all assent from the application of the name Piyadassano—Sans. Priyadarsana, of kind or agreeable appearance, to Asoka,—it seems very inexplicable why, in none of the inscriptions, his own appellation, Asoka, or Dharmasoka, should ever be mentioned. In no one of the rock or pillar inscriptions is there the slightest trace of such a name as Asoka. There is no reason, as far as we are aware, why an Indian prince, whether Buddhist or Brahmanical, should prefer an alias to his proper denomination, and the practice of all later times is opposed to such a peculiarity. In the numerous inscriptions found in other parts of India, the names of the Princes, and very commonly of their ancestors for several generations, are recorded, and we may be reasonably enough surprised that in this instance alone, an epithet should have supplanted a name,—for that Piyadasi is not a proper name, but an epithet, we not only infer

from its literal signification, but we know it to be so from its being, according to Mr. Turnour, the title of one of the twenty-four Buddhas in the *Dīpavāṇso*. We find it also to have been applied to one other prince at least, who was a different person from Asoka. *Su-darsana*, which is much the same thing, or good-looking, is a very common name for Hindu princes,—but we have a *Piyadasano*—or in the *Māgadhi* form, *Piyadasane*—in the *Kalpa Sūtra*, one of the scriptural authorities of the Jains, of which a translation by the Rev. Mr. Stevenson, has been lately published by the Translation Committee. The term *Piyadasane*, which he renders, lovely to behold, is there applied to the Raja *Siddhārtha*, sovereign of *Kundagrāma*, and putative father of *Mahāvīra*, the last Jain Tirthankara, who, according to the Jains, was the preceptor of the Buddha *Gautama*. The same prince also bears the title of *Devanupīya*,—the beloved of the Gods—so that neither of these epithets is exclusively restricted to Asoka, even if they were ever applied to him.

That they were so applied is rendered doubtful by chronological difficulties, of which it is not easy to dispose: *Piyadasi* appears to have lived, either at the same time with, or subsequent to, Antiochus. Could this have been the case if he was Asoka? For the determination of this question, we must investigate the date at which the two princes flourished, as far as the materials which are available will permit.

The first point to be adjusted is, which Antiochus is referred to. There are several of the name amongst the kings of the Seleucidan dynasty, whose sway commencing in Syria, extended at various times, in the early periods of their history, through Persia to the confines of India. Of these, the two first, Antiochus Soter and Antiochus Theos, were too much taken up with occurrences in Greece and in the west of Asia, to maintain any intimate connexion with India, and it is not until the time of Antiochus the Great, the fifth Seleucidan monarch, that we have any positive indication of an intercourse between India and Syria. It is recorded of this prince that he invaded India, and formed an alliance with its sovereign, named by the Greek writers, *Sophagasenas*, in the first member of which it requires the etymological courage of a Wilford to discover Asoka. The late Augustus Schlegel conjectured the Greek name to represent the Sanskrit, *Saubhāgya sena*, he whose army is attended by prosperity; but we have no such prince in Hindu tradition, and it could scarcely have been a synonyme of *Asoka*, the literal sense of which is, he who has no sorrow. Neither is *Sophagasenas* more like *Piyadasi*, and so far therefore we derive no assistance as to the identification of Antiochus. Still, with reference to the facts, and to the allusion to his victorious progress, which

Tablet XIII. seems to contain, we can scarcely doubt that he was the person intended, and that the Antiochus of the inscription is Antiochus the Great, who ascended the throne, B.C. 223, and was killed, B.C. 187. The date of his eastern expedition is from B.C. 212 to B.C. 205.

There is, however, an obvious difficulty in the way of the identification from the names of the princes which are found in connexion with that of Antiochus, and which the thirteenth Tablet appears to recapitulate as those of contemporary princes,—subjugated, if the conjectural interpretation be correct, by Antiochus. With respect to one of them, Ptolemy, this is allowable, for Antiochus the Great engaged in war with Ptolemy Philopator, the fourth king of Egypt, with various success, and concluded peace with him before he undertook his expedition to Bactria and India. He therefore was contemporary with Antiochus the Great. It is, however, to be recollected that Ptolemy Philopator was preceded by three other princes of the same name, Ptolemy Soter, Ptolemy Philadelphus, and Ptolemy Euergetes,—extending through a period of rather more than a century, or from B.C. 323 to B.C. 221. These princes were frequently engaged in hostilities with the Seleucidan kings of Syria, and we cannot therefore positively determine which of them is referred to in the inscription. The long continuance of the same name, however, among the kings of Egypt, as it was retained until the Roman conquest, no doubt made it familiar throughout the East, and we need not be surprised to find it at Kapur di Giri or Girnar.

The same circumstance will not account for the insertion of the name of Mako, probably Magas, for although there was such a prince, he was far removed from India, and of no particular celebrity. Magas was made ruler of Cyrene by his father-in-law, Ptolemy Soter, the first Greek king of Egypt, about B.C. 308. He had a long reign of fifty years, to B.C. 258. He was not therefore contemporary with Antiochus the Great, dying thirty-five years before that prince's accession. He was connected with Antiochus Soter, having married his daughter, and entered into an alliance with him against Ptolemy Philadelphus,—and this association with the names of Antiochus and Ptolemy, generally but not accurately known, may have led to his being enumerated with the two other princes of the same designation, Ptolemy Philopator, and Antiochus the Great. There was a Magas also, the brother of Philopator, but he is of no historical note, and was put to death by his brother in the beginning of his reign. The allusion is therefore, no doubt to the Magas of Cyrene.

It is impossible to explain the juxta-position of the other two names, Antigonus and Alexander, upon any principle of chronological

computation, although we can easily comprehend how the names were familiarly known. That of Alexander the Great must of course have left a durable impression, but he is antecedent to any of his generals who made themselves kings after his death. It is very unlikely that his son Alexander, who was not born till after his death, and from the age of three years was brought up in Macedonia, where he was murdered when only twelve years old, should be the person intended, and a greater probability would attach to an Alexander who was Satrap of Persia in the beginning of the reign of Antiochus the Great, and rebelled against him. He was defeated and killed, B.C. 223. So far therefore we have an Alexander contemporary with Antiochus, if that be thought essential; but it seems more likely that here as in the case of Magas, the concurrence of names is no evidence of synchronism, and arises from the name being familiarly known without any exact knowledge of the persons by whom they were borne.

Such seems to be the case also with respect to Antigonus. The most celebrated of the name, Alexander's general who succeeded to the sovereignty of Phrygia and Lycia, extended his authority to the East by the defeat and death of Eumenes, and his name may thus have become known in India, although the scene of his victories over his rival was somewhat remote from the frontier, or in Persia and Media. The latter portions of his career were confined to Asia Minor and Greece, and he was killed B.C. 301. He was contemporary with the first Ptolemy but not with Antiochus, having been killed twenty years before the accession of Antiochus Soter. We have another Antigonus, the grandson of the preceding, who was contemporary with Antiochus Soter, but his life was spent in Macedonia and Greece, and it is not likely therefore that any thing should have been known of him in India. It can only be the first Antigonus whose designation reached an Indian prince, and the mention of him in conjunction with Ptolemy, Antiochus, Magas, and Alexander, shows clearly that the chronology of the inscription was utterly at fault if it intended to assign a contemporary existence to princes who were scattered through, at least, an interval of a century. We must look, therefore, not to dates, but to the notoriety of the names, and the probability of their having become known in India, for the identification of the persons intended. Under this view, I should refer Alexander to Alexander the Great, Antigonus to his successor, Magas to the son-in-law of Ptolemy Philadelphus, Ptolemy to either or all of the four first princes of Egypt, and Antiochus to the only one of the number, who we know from classical record did visit India, and who from the purport of the inscriptions we may infer was known there

personally,—Antiochus the Great. In this case we obtain for the date of the inscriptions some period subsequent to B.C. 205, at which it seems very unlikely that Asoka was living.

There is an entire accordance between the Brahmans and the Buddhists as to the descent of Asoka. The series of princes in the Purānas and in the Mahāwanso are manifestly the same, and were both derived probably from a common source, the lists of the bards, or professional chroniclers, to whom the preservation of historical traditions was consigned. Asoka, according to both was the son of Bindusāro (called in one Girnar inscription, Pushpagupta) the son of Chandragupta, and there is no reasonable ground for questioning the identity of Chandragupta, or Chandagutta, with the Sandrocottos or Sandrocottos of the Greeks, the ally of Seleucus Nicator, B.C. 305. According to the Vayu Purana, Chandragupta reigned twenty-four years, and his successor twenty-five. Some of the Buddhist authorities assign thirty-four years to the first, but the Attakathā, in a passage, the reading of which Mr. Turnour prefers, agrees with the Purana¹. To Bindusāro, twenty-eight years are assigned, which makes an interval of fifty-two years between the accessions of Chandragupta and Asoka. How much of Chandragupta's reign preceded his alliance with Seleucus, we have no means of ascertaining. As far as we can trust to Justin, he was personally known to Alexander, although not then reigning; and it appears generally from classical authority, that he attained sovereignty not long after Alexander's invasion. If we deduct five years from that event, we shall place the beginning of Chandragupta's reign about B.C. 318; and that of Asoka's will consequently commence about B.C. 266. He reigned, according to one authority twenty-six years, and to another thirty-seven years; if we admit the longer period he will have died 229 B.C., or seventeen years before Antiochus the Great engaged in his Eastern warfare, twenty years at least before the supposed alliance with him could have taken place. If we are to class the inscriptions in the order of their succession, which however is not exactly the case, we should have to place the alliance of Piyadasi with Antiochus still earlier. It is alluded to for instance in the Second Tablet, whilst the Third Tablet is dated in the twelfth year of his reign, or B.C. (266—12)=254, which is forty-two years earlier than the date of the commencement of the expedition of Antiochus to the East. Of course the formation of the alliance would have fallen within the limits of the reign of Asoka, some years prior to his decease, and in

¹ Journal Asiatic Society, Bengal, vi., 725, note.

proportion as it approached the beginning of his reign, the distance between the probable date of the alliance and the existence of Asoka is enhanced. To obviate the chronological difficulty it has been suggested that the Antiochus alluded to is not Antiochus Magnus, but Antiochus Theos, who reigned from B.C. 261 to B.C. 246, and who would therefore be contemporary with Asoka. This is no doubt true, but as intimated above, historical events are opposed to the maintenance of any friendly connexion between the princes of India and Syria during the reign of Antiochus Theos. At its very commencement he was involved in hostilities with the King of Egypt; the war continued during the greater portion of his reign, and amongst its results, were the neglect and loss of the Eastern provinces. Media and Bactria became independent principalities, and their geographical, as well as political position must have completely intercepted all communication between India and Western Asia. It is very unlikely that an Indian sovereign would have promulgated any alliance with the enemy of his immediate neighbours, and we should rather look for the names of Arsaces or Theodotus in his edicts, than that of Antiochus Theos. We cannot, therefore, upon historical grounds admit the identity of the Antiochus of the inscriptions with Antiochus Theos, any more than we can recognize an alliance between Asoka and Antiochus Magnus, as chronologically probable upon such premises as we derive from classical Pauranic, and partly Buddhist data.

If, indeed, we are guided solely by the latter, we shall render the synchronism of the two princes still more impossible. According to the Dīpawanso and Mahāwanso, Dharmasoka was inaugurated two hundred and eighteen years after the death of Buddha; his inauguration took place four years after his accession, and we place the latter therefore two hundred and fourteen years after the Nirvān of Gautama. The date of this event was B.C. 543, and $543 - 214 = \text{B.C. } 329$, and Asoka, therefore, ascended the throne, according to the Buddhists, before the invasion, not of Antiochus, but of Alexander the Great. This however must be wrong, and Mr. Turnour acknowledges that the chronology of the Buddhist chronicles is here at fault; he makes the error amount to about sixty years, and conceives that it was an intentional vitiation of the chronology: with what purpose he has not explained. It is enough for us to determine that Asoka cannot have been the cotemporary of Antiochus the Great, according to the chronology either of Brahman or Buddhist. That Piyadasi was the cotemporary of Antiochus, or even posterior to him, is evident from the inscription, and therefore Piyadasi and Asoka are not one and the same person.

That Asoka became a convert to Buddhism after commencing his reign as a sanguinary tyrant, may or may not be true: we have only the assertions of the Buddhists for the fact. But allowing it to be true, if Asoka was not the author of the edicts in question, no inference of their Buddhist character can be drawn from his conversion to the faith of Buddha, and the uncertain evidence afforded by their language is not rendered less equivocal by any positive proof of their having been promulgated by a prince who was a zealous patron of the doctrines of Sākyasinha.

But who then was Piyadasi, the beloved of the gods? This is a question not easily answered. The term is evidently an epithet applied to more than one individual, and not the proper designation of any one person exclusively. We have no such name in any of the Brahmanical traditions, and find it in the Buddhist, as indicating a sovereign prince, to whom it could not have been applied consistently with chronological data, upon the authority of a work of the fourth century of our era. That any uncertainty with regard to its appropriation should exist, seems very incompatible with the extent of the dominions ruled over by the prince of the inscriptions, as far as we are to infer, from the sites in which they are found, as Guzerat, Cuttack, Behar, Delhi, and the Punjab. A monarch, to whom all India, except the extreme south, was subject, must surely have left some more positive trace of his existence than a mere epithet, complimentary to his good looks, and shared with many others of equally pleasing appearance. That such almost universal sovereignty in India was ever exercised by a single prince is extremely improbable, and it is undeniable from the evidence of the inscriptions themselves, that they have not been sculptured, in the situations in which they occur, contemporaneously with the year of any individual reign. Thus, in all the rock inscriptions, the third and fourth edicts are said to be issued in the twelfth year of Piyadasi's inauguration; the fifth and eighth, in the tenth year; the two later edicts in point of time taking precedence of the two earlier, in the order of inscription—an utter impossibility. We can only infer, therefore, that they were simultaneously inscribed. Mr. Prinsep states, that it is so specified in the Fourteenth Tablet, but I am unable to understand the passage in that sense. That it was the case however is obvious, from the inverted order of the dates, and from the uniform appearance of the inscriptions. The whole must have been cut, therefore, at some subsequent period to the latest of the dates. How long subsequent, is another question of impossible solution; but it is very improbable that the rocks of Guzerat, Dhauri, and Kapur di Giri, were all engraved at

the same time. The operation must have been spread over some years, and it is not unlikely that it was subsequent to the date of their reputed author, if he ever had a real existence. It seems, however, not improbable, that the rulers of the several countries or influential religious persons adopted the shadow of a name, to give authority to the promulgation of edicts intended to reform the immoral practices of the people, and for that purpose repeated documents which had acquired popular celebrity in some particular locality not yet ascertained.

An indisputable inference is also to be drawn from an assertion of the inscriptions themselves against their homogeneous character. Either those prior to the twelfth year of Piyadasi's accession, or those subsequent to it, and extending to the twenty-seventh, cannot be Buddhist, for the latter declares that an edict issued in the twelfth year of Piyadasi's reign, was caused to be destroyed as being a sinful obstruction of the increase of Dharma, or as Mr. Prinsep renders it,—from the Raja's regarding his former religion as sin,—Inscription of the Eastern compartment of the Delhi Lát. If the translation is correct, and in substance it seems to be so, there are two sets of opposing doctrines in the inscriptions, and of course both cannot be Buddhist. Mr. Prinsep comes to the conclusion that the Buddhist account of the date of Asoka's conversion, the fourth year of his reign, is erroneous, and that he could not have changed his creed until after his twelfth year. Then it follows that most, if not all the Rock inscriptions are not Buddhist, for the only dates specified are the tenth and twelfth years. Those on the Láts appear to be all of the twenty-seventh year. If, however, those of the earlier dates are not Buddhist, neither are those of the later, for there is no essential difference in their purport. They all enforce the preference of moral to ceremonial observances, and often employ the very same phraseology. We can only reconcile the contradiction by supposing the language of the Lát inscription to be misinterpreted,—and we must then feel how unsafe it is to come to any confident conclusion upon premises so insecure as the imperfect rendering of the very obscure expressions of the original inscriptions.

From these considerations, I have been compelled to withhold my unqualified assent to the confident opinions that have been entertained respecting the object and origin of the inscriptions. Without denying the possibility of their being intended to disseminate Buddhism, and their emanating from the Maurya prince Asoka, there are difficulties in the way of both conclusions, which, to say the least, render such an attribution extremely uncertain. The inscriptions still require to be

interpreted by some person who is at once a thorough Sanskrit and Pali scholar, and possibly they still require to be re-examined and transcribed: at any rate, such is indisputably the case with the Kapur di Giri inscription. And until we have readings and translations on which we can implicitly rely, it will be prudent to refrain from substituting positiveness for possibility.

In coming to this conclusion, nothing can be farther from my intention than to undervalue what has been attempted and accomplished. Infinite care and labour have been bestowed upon the transcription of the inscriptions, as far as circumstances have permitted; and at Girnar in particular, whatever anomalies and obscurities occur, must be chargeable to the carelessness and ignorance of the sculptor, as we cannot question our being in possession of most faithful copies, after the able exertions of Wilson, Postans, Jacob, and Westergaard. Dhauli and Kapur di Giri have not yet been examined under equal advantages.

With regard also to the translations which we owe to the learning and ingenuity of the late James Prinsep, we must remember, that they were the first attempts to convey a knowledge of the purport of documents in a new character and unknown language; and that copies of the Lát inscription had been published for many years, but had baffled the application of the most eminent scholars, and had remained undecyphered until James Prinsep discovered their real nature, and rendered them readable by his successors, without which they would probably have continued to the present day as unintelligible as ever. Whatever may be objected also to particular passages, the substance of the inscriptions is no doubt correctly translated, and whether it justifies the conclusions which the translator has drawn, is fair matter for discussion. Its incorrectness, even if established, will not invalidate his claims to our acknowledgment and admiration for what he has accomplished with unequalled labour, incomparable ingenuity, and unrivalled success.

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ART. VI.—*The Pehlvi Coins of the early Mohammedan Arabs.*
By EDWARD THOMAS, Esq., *Bengal Civil Service.*

[Presented June 2, 1849.]

It but rarely occurs amid the often dry details of Numismatic inquiries that we meet with a subject combining such varied claims upon the attention of so many distinct classes of archæologists, as that now about to be brought under the notice of the Royal Asiatic Society.

This may be freely said, in regard to the numerous points of interest, which will be seen, severally in their turn, to afford matter worthy of the consideration of the general antiquary, the local historian, the philologer, the palæographer, and the medallist. In respect also to the attraction of intrinsic novelty, the specific investigation it is sought to illustrate in the following essay, will be found to merit this distinction in a high degree; the ground being not only comparatively unbroken, but possessing the additional peculiarity, that the first plough has only recently penetrated its surface, inasmuch as six years ago, the European world knew not the signification of the characters in which the legends on the first Arab Dirhems are expressed. For the solution of this enigma we are indebted to the acuteness of Professor Olshausen of Kiel, who, in a comprehensive Memoir on the Pehlvi Legends on Sassanian Coins¹, has set forth the circumstances attending the original identification, as well as the general results of his subsequent studies in the same department. In concluding his review of the various classes of Sassanian medals that had come under his cognisance, the learned Professor expresses a hope that the avowedly ample contents of our London Cabinets—to which he himself had had a most incomplete access by means only of occasional casts and engravings—might be subjected to a deliberate scrutiny, and the results made known to the antiquarian public: the desire of fulfilling this object has led to the examination of these monuments, the details of which it is now proposed to lay before you.

It may not be generally known to the broad majority of English

¹ Die Pehlwie Legendes, &c. This Memoir has been translated, under the auspices of Professor Wilson, and published in the London Numismatic Chronicle for 1848, vol. ix.

readers, that Oriental Numismatists have for some time past been able to appropriate with a fair degree of confidence, a comparatively complete series of medals of the earlier Sassanian period of the Persian monarchy¹, and a sufficiently obvious commencement of the suite of *pure* Mohammedan money of the same kingdom, the latter being distinguished by their Kufic inscriptions, and having reference to years closely following that marked epoch in the history of the Arabian coinage, A.H. 76, when the Khalif Abdalmalik first regulated the device and superscriptions of the currency of his dominions, with a view to satisfy the newly raised scruples of the professedly more orthodox disciples of the creed of Mohammed. For some years after the definite identification of the chief features of either of these classes of medals, it remained a matter of regret to those devoting themselves to such studies, that though in possession of numerous well-executed specimens of the various coinages, seemingly forming the intermediate links required to connect the one with the other, the alphabet in which their legends were expressed continued to defy decipherment. An important advance in the elucidation of the general subject was

¹ De Sacy, *Mémoires sur diverses Antiquités de la Perse*, Paris, 1793: Sir W. Ouseley, *Observations on some Medals and Gems, &c.*, London, 1801: Ker Porter, *Travels*, London, 1821: A. de Longperier, *Sur les Médailles de la Dynastie Sassanide*, Paris, 1840. The humility of M. De Longperier's prefatory address and the limited results he professed to achieve, secure him from any severe criticism; but my readers have a right to demand that in citing his work I should point out so much of its deficiency as concerns the subject to which this paper is devoted. This is happily confined to the concluding portion of his undertaking, or the five coins in Pl. xii., which terminate his work; these, as has been sufficiently shown by Olshausen, are without exception erroneously interpreted. The reading of Nos. 69 and 70, "Sarparaz," [properly *Aumari*, see the 6th Governor, *infra*,] is marked by a note of interrogation, which sufficiently indicates that it was founded on a mere conjecture; but the decipherment of No. 72 is given without any such evidence of doubt, and yet when examined, instead of admitting of interpretation as "retrograde" Pehlvi referable to the Queen "Azermi" Dokht, the legend is found to be couched in very intelligible Kufic, and to convey the name of Hámí. The same character on a similar coin had already been correctly read by that sound and accredited Numismatist Professor Fræhn, and published in the *Journal Asiatique* of Paris, long previous to the appearance of the *Essai Sur les Médailles de la Dynastie Sassanide*, (1824, tom. iv., p. 335.) That the memoir which contained the notice of this coin should have escaped M. De Longperier's eye is the more singular, as it is not only accompanied by a plate, which might well have attracted attention, but in itself entered into a controversy upon the author's interpretation of a Fire-Worship coin, which M. De Sacy, M. De L.'s acknowledged guide, had called in question. Professor Fræhn's paper likewise put forth an approximate solution of the Kufic legend of M. de Longperier's No. 73 (مقابل), which the latter author imagined might possibly be read as "Roustam."

made by Professor Fræhn, of St. Petersburg¹, who, though able to examine the question solely through the medium of the Kufic names to be found on certain Pehlvi medals, availed himself to the fullest extent of the scattered notices in Arab authors having reference to such matters, which, combined with the tests afforded by the coins themselves, enabled him to allocate in a most decisive manner that particular class of the *bilingual* Pehlvi-Kufic Coins, which necessarily preceded the rejection of the first, and the exclusive adoption of the last of these systems of writing. It was thus determined that the celebrated Hejáj bin Yusaf, who was known to have been officially instrumental in the remodelment of Abdalmalik's coinage, was one of the earliest if not the first, who had deviated from the previous practice so far as to have his name inscribed on the Pehlvi fire-worship coins, the descendants of the ancient Sassanian type, in the recently invented², but now recognised religious alphabet of Mohammedanism. The publication of the Arabic text and translation of Makrísí's History of the Arab Coinage³, had long ago made known the fact, that the Arabs had, in the first spread of their Eastern conquest, retained unaltered the typical characteristics of the money found current in their newly acquired Persian provinces, as they in like manner have since⁴ been found to have continued to use with equal religious unreserve, the Greek coins of the Syrian dependencies wrested from the Byzantine emperors. These items, however, may be said to have constituted the extent of our knowledge of the subject, as the purely numismatic portion of the inquiry presented nothing but an absolute blank; materials in ample profusion were available, but the power of using them was altogether wanting, until in 1843 the success of Dr. Olshausen's investigations enabled him to prove most distinctly that the characters inscribed on the early Arab (or as he has named them, the Arabico-Khusrú) coins, as well as those on many other prior

¹ *Journal Asiatique*, Paris, tom. iv., 1824, and elsewhere.

² See Introduction to Ibn Khallikan, O. T. F. pp. xv, xvi, &c.: Klaproth, *Aperçu de l'Origine des Diverses Ecritures de l'Ancien Monde*, Paris, 1832, p. 82. See also De Sacy, *Sur l'Histoire de l'Ecriture chez les Arabes du Hedjaz*: *Journal Asiatique*, 1827; and Marcel's *Paléographie Arabe*, Paris, 1828, p. 7. Lindberg likewise has some good remarks upon the subject, among the rest, "D'après ce que rapportent les historiens, il faut présumer, que le caractère eufique doit son origine à l'ancien Syriaque ou Estranghélo et au Persan Pehlwi. Les comparaisons, qu'ont faites M. Adler avec l'écriture Estranghélo et M. Kopp avec l'écriture Pehlwi semblent mettre la chose en évidence." Lindberg, *Lettre*, &c., p. 36. Copenhagen, 1830.

³ Al Makrizi, *Historia Monetæ Arabicæ*, ed. O. G. Tychsen, Rostok, 1797.

⁴ M. De Sauley, *Journal Asiatique*, tom. vii., 1839, pp. 404—502-4, &c.

and subsequent subdivisions of the later Sassanian coinages, were substantially identical with the original elements of the alphabet, communicated to M. Anquetil du Perron by the Parsis of Bombay¹. In regard to the language conveyed, it was found to differ but little from the modern Persian, though clearly subject in itself to extensive incidental modifications, and to the usual local and provincial variations.

Before proceeding to the details, which demand in some respects minute attention, it may be useful to note briefly the more prominent points of interest peculiar to the different aspects of the entire subject, comprehended in the full Numismatic History of Persia and its dependencies for the century preceding the introduction of Kufic legends, so as in some measure to exemplify the grounds upon which is based the claim previously made upon the attention of the severally specified classes of antiquarian students.

I. To the casual admirer of archæological investigations, we would observe that the present subject possesses a peculiar title to consideration in the circumstance, that the medals, which supply the groundwork of the various collateral inquiries elucidatory of the main question, illustrate the purely initial progress of Mohammedanism over a tract of country, whence its subsequent institutions derived much of their peculiarity of tone and spirit, and in which much of the usually called *Arab* civilization had its origin². In other lands the followers of Islâm conquered kingdoms and provinces: *here* alone, they acquired *an empire* in its complete integrity; here, they found themselves sole possessors of the once bright glories of the successors of Darius³, and near the formerly proud metropolis of the Khusrûs, rose but at a brief interval the future centre of the Moslim world⁴.

¹ Anquetil, *Zend-Avesta*, Paris, 1721. See also remarks on the Pehlvi Alphabet, by M. Rask, *Journal Asiatique*, t. ii., p. 143; and Müller's invaluable *Essai sur la langue Pehlvi*, *Journal Asiatique*, t. vii., 3e Series, (A.D. 1839.) Major Rawlinson has also many scattered criticisms on the Sassanian Pehlvi Alphabet, *Journal Royal Asiatic Society*, Vol. X.

² A single quotation such as the following speaks sufficiently to this:—

در عهد عبدالمک جراید دیوانی از صورت فارسی باعربی نقل
کردند و رقم بنیاد نهادند

Tarikh Guzidah, MS. E.I.H. No. 180.

Ardeshîr Bâbegân, the founder of the Sassanian Dynasty, claimed descent from as well as the kingdom of Darius.

⁴ Baghdad was founded A.H. 145. Madain is "at the distance of one merhileh from Baghdad." Istakhri, Ouseley, p. 69.

Referring to the importance attributed to this conquest by the early warriors of the faith themselves, it may be seen from their own showing¹ how highly they estimated the value of their once unhopèd-for success, even as contrasted with the nearly simultaneous progress of their arms over the Eastern dependencies of the Byzantine Greeks, which has naturally received so much larger a share of notice from our western authors.

It is also in itself an investigation of more than usual interest to trace the first efforts at the establishment of a regular monetary system by a race, who subsequently attached such exaggerated importance to the *right to coin*, and used the means therewith associated in their finer shades and more minute distinctions, to indicate, not only the simple possession of supreme power—whether spiritual or temporal—but to express by the relative position occupied by the names of each, the proportional estimation pertaining severally to the issuing authority, to his hierarchical, as well as to his feudal lord.

Often, this instrument in the hands of the ruling power was made the vehicle whereby to announce intentions or proclaim accomplished facts, and the current coin of the empire conveyed to the comprehension of the scattered races who bowed to Moslim sway, the official recognition of an heir apparent, or the reminiscent boast of the latest victory. The Mint system of the Mohammedans likewise, in its elaboration in reference to religious tenets, eventually extended much beyond the accustomed setting forth of the chief and received professions of the creed, and progressed occasionally to the definition of the sectarian division which prevailed in the land wherein the coin received its stamp.

The first advance in the scale of Arabian adaptive coinage, to which the present paper is more expressly devoted, presents us with some examples of the names of the very "Companions" of the Prophet, and more at large with the designations of the immediate associates and successors of these notable men: as the pieces, upon which these names are inscribed, usually convey in full, both the record of their own year of issue², and their place of mintage, they are

¹ Witness Omar's anxiety regarding the result of the battle of Kadesia, (Price, I.) and the so entitled "Victory of Victories" of Nehavend, &c.

² The recorded year of issue, though true in itself, is not always to be relied on in its bearing upon the individual whose name appears on the opposite surface of the coin, as in those early days of mint arrangement, the name of a governor was often retained on the coins of succeeding years, after his actual decease, so that it is occasionally unsafe to quote the later dates of a governor's coinage, though the initial epochs may be taken as fully trustworthy.

most intimately identifiable with the exact history of the day, and in these medallie monuments we trace with a but recently recovered power of intelligence, the earliest reference to the foreign homes, the adopted cities, or the newly-founded capitals of the children of the Desert—in effect, from the unquestionable contributions tendered by the coins themselves, in the writing now again legible on their surfaces, we are in a position to illustrate from a previously almost despaired of source, many curious coincidences in the early location of the Moslim Arabs in Persia, as well as perhaps more fully many acceptable details concerning the progressional advances in the general scheme of their curiously organised body-politic.

It is a distinction peculiar to the class of money which now occupies our attention, that we find in their legends not alone the single title of one Supreme Ruler, but definite indications of the distribution of the executive power, in the perpetuation of the names of most of the eminent men who shared the glory of the first firm establishment of that remarkable *success*, the consolidated empire of the early followers of Mohammed. In the Numismatic records of the troublous years from A.H. 43 to 72¹ we can distinguish the predominance of this or that faction, as shown in the impress of the names of the chief disputants, or those of their recognised lieutenants, till we see the whole Mohammedan world brought safely under the single sceptre of Abdalmalik at the period last cited. So also, retracing our steps for the moment, we can associate from the concurrent signs and tokens displayed by the coinage, many of the successive phases in the advance of the principles of civil government, as passing from the simple elective acts² which usually placed the first Vicars of the Prophet at the head of the votaries of Islám, exemplified in the contentment of the presiding authority to confirm the circulating medium of the country upon the basis of an adherence to existing types and a retention of even previous legends—and in his failure to take advantage of the elsewhere-valued kingly privilege of signalling the possession of power by the issue of a coinage peculiarly his own. We must pass in silence over the next step towards formal monarchy, evinced in the recognition of the hereditary tenure of the Khiláfat under Moavia in A.H. 60, of which we are at present unable to cite any collateral medallie evidence, and proceed onwards to refer to the numismatic illustration of the growing tendency to concentrate all honour in a single absolute master, afforded by the superscription of the *Arabian* Khalif Abdallah Zobeir's name, in the place of that of the admi-

¹ Ockley, 474. 479. (Bohn's edit.) ² Ockley, 141. 271. 287. 346.

³ Ockley, 377.

nistrative officer, on the provincial coinage; a practice, in one instance within our reach, seen to have been imitated by his successful rival Abdalmalik (Coin No. 45, A.H. 75.) About this date, in consequence of the rupture arising out of the allusions to their several creeds, which took place between the Khalif and the Byzantine emperor¹, whose mints had hitherto supplied the entire gold currency of the Syro-Arabian dependencies, the various existing systems of the coinages of the Mohammedan empire were subjected to a comprehensive revision; and as feelings of religion had been the cause of the first reference to the subject, the discussions and controversies which ensued resulted in the production of a strictly Mohammedan series of dies, whose fields were occupied only by the dull repetition of stated texts from the Korán, with a marginal record of the date and place of mintage of the piece to be impressed, unenlivened by any notice of mundane names, whether of priest or king².

II. To the local historian all these latter indications, in their various bearings, must of course be valuable, over and above which may be cited the material assistance to be derived from our coins, in the advancement of a knowledge of the comparative geography of the countries to which they refer; demonstrating on the one hand the then existing arrangement of the departmental divisions: and on the other, the relative importance of the leading provincial cities as exemplified by the test of the possession of a mint. Next may be noted the more critically useful aid to be derived from the dates furnished by these numismatic monuments, which now appear for the first time, in the *Persian* monetary series, illustrated by these convenient records, expressed in the readily intelligible shape of a single serial cycle, instead as of old,*referring to the epochs of the accession of each succeeding king, the determination of the initial date of whose reign was in each case necessarily dependent upon the accurate justification of those of his predecessors.

III. The philologist may notice that the present series, with its associate and dependent classes, not only offers the remarkable instance of the use of varieties of what for the present must be assumed to be the same tongue, but it also affords the striking example of a nearly contemporaneous employment of no less than four distinct sets of linguistic symbols, if not of four diverse languages. It is true that we must not expect, from the limited sentences available, any very comprehensive checks upon the comparative philology of the day, still, much may be gained from a close and systematic examination of these

¹ Makrizi, p. 84.

² Fræhn's Recensio, pp. 6 to 16.

materials; and if they may be found to offer no other indication of value, they suffice to determine, when considered in reference to their associate mint cities, the necessary currency of certain languages in certain definite countries; and this too with a degree of precision we could scarcely obtain from any other monumental sources.

IV. Those who seek to observe the peculiarities of the older forms of Eastern writing, may gather from the illustration furnished by the coins under review, many incidental facts worthy of investigation, whether it be to trace on the one hand the marked varieties in the forms of the Pehlvi characters in numismatic use among the later Sassanians and their Arab conquerors and immediate successors, as diverging from the previous alphabet of the earlier monarchs of the race of Sassan; or on the other hand, to examine the distinctions introduced into the modern characters, owning the same origin, as employed at the present day by the Parsis of Bombay. Turning to another set of alphabetical symbols—here may be seen the earliest examples of the adoption of Kufic, the sacred alphabet of the Korán, a literal series then only newly invented, but since expressly identified with the growth of Mohammedanism and the first efforts at polished Arabic literature. Not less does the variety in the forms of the Sanskrit, in vogue in the more easterly provinces of Persia at the epochs in question, as preserved on one class of Fire-Worship coins, claim a passing notice: though it must be confessed, that in the present state of our knowledge, little more can be essayed than to compare the isolated letters of the longer inscriptions with their apparent equivalents in the proved Devanagari alphabets of neighbouring lands, as preparatory to an ultimate elucidation of the purport of the entire legends.

Lastly, some of our medals display connected legends couched in characters so new to modern eyes, and so imperfectly associable with any known alphabetical system, that, imitating previous commentators, it would perhaps be wise to avoid any conjecture as to their origin or the language they represent. Still, as some remarks regarding the local existence and duration of the use of this alphabet have suggested themselves as the examination of certain collateral series of coins has been proceeded with, I have thought it right to annex a few observations on the subject, under a separate head.

V. To the scientific numismatist enough has been already said to advocate the cause of the Arabico-Khusrú series; upon the mere collector, who would even mechanically arrange his cabinet, it is scarcely requisite to urge the use of the present investigation, which should aid, at least, rightly to fill in a most objectionable and un-

seemly gap in the medallie sequence of an historically important kingdom, and so unite a serial thread already comparatively complete in its prior and subsequent divisions.

The inquiry into the history of later Fire-Worship coins has been divided by Professor Olshausen into four distinct sections, classed under the several heads of—

1. Coins of Tabaristán. 2. Earliest coins of the Arab governors of Persia. 3. Indo-Persic coins of Eastern Irán. 4. Coins of the last Sassanian kings¹.

As the cabinets to which the learned German had access were chiefly rich in Tabaristán coins, the examination of this suite necessarily forms the leading subject of his Memoir. The materials now available, to which attention will be specially directed in the following pages, consist mainly of the numismatic accumulations of Mr. Masson, which, as might have been anticipated from the *locale* of their discovery, prove usually to be the produce of the eastern mints of Persia: hence it will be found that the present accessions to the general stock excel, in the numerical strength of the Khorásán types, any previous collection of Fire-Worship medals; the deficiency in variety in the Masson cabinet has been to a certain extent remedied by the free reference I have enjoyed to the collections of the British Museum, Sir H. Willock, General Fox, Mr. Bland, Mr. Stokes and others.

Some explanation is due to account for the incomplete form in which the present paper is now put forth. But when the subject was first entered upon, I was, I confess, quite unprepared to encounter the numerous subordinate inquiries it proved requisite to master for a full and perfect understanding even of that particular section of the suite of Persian antiquities to which I then proposed to restrict my attention. I was aware from the first that the time at my disposal was limited, but I had no idea of the extent and difficulty of the ramifications into which so apparently simple an inquiry really extended itself; hence I speedily recognised the necessity of reducing the more prominent object of my undertaking to such a portion of the entire circle of the investigation, as should admit of the probability of being brought to a reasonable degree of completeness within the given time. As such I resolved to confine the direct purpose of the present Essay to an elucidation of the Pehlvi coins of the early Mohammedan Arabs, leaving the medals pertaining to the other subdivisions of the entire series, having typical connexion with the first

¹ Num. Chron., vol. xi., p. 58.

Arab adapted coinage, for the mere incidental notice which might suggest itself as the main question was proceeded with. I should have indeed hesitated to make public these detached contributions to the history of the early Arab coinage, had I not known that,—however ill I might hitherto have succeeded in explaining many of the difficulties,—my continuing the investigation and perfecting the study was rendered impracticable by my speedy return to my more important duties; at the same time I was conscious it was in my power to furnish in the fac-similes of the legends of even the unidentified coins, and the monogrammatic names of their mint cities, many important aids for the eventual illustration of the subject prepared to the hands of others; and thus in the division of labour, to contribute my share (though in this respect a merely mechanical one) to the general knowledge of a most interesting section of mediæval history.

THE ALPHABETS.

As the most fitting introduction to any attempt at Pehlvi decipherment, I set forth—both as the basis of my own renderings, and as likely to furnish a useful aid to those who would follow up an imperfectly explored subject—a comparative Palæographic Table (Plate I.), showing the Pehlvi character in various stages of transition, from our earliest example of its use as Lapidary Sassanian, through the modification of that alphabet employed on the later Sassanian coins, and the more precise numismatic development it received at the hands of the Arabs, to the current form imported into Europe with the later Guebre MSS.

The table, in its present shape, will, I trust, prove sufficiently intelligible in all that it purports to show; but some explanation may be required as to whence I obtain my data, and my authority for certain assignments not yet before the public.

I would also take this early opportunity of remarking that the single suites of Numismatic characters, set forth in the lithograph, are not in any wise to be understood as calculated to meet the numerous cases of progressive and provincial variations which will be found to abound in the different series of medals noticed below. The object proposed in the present exposition of these alphabets is to afford a general idea of the most prevalent shapes of each letter, without perplexing the reader with a list of variants, which, however well ascertained in the instances whence they might be cited, frequently consist

Hebrew	Chaldean	Samaritan	Arabic	Arabic	Arabic	Arabic
א	ܐ	ܐ	ا	آ	أ	أ
ב	ܒ	ܒ	ب	ب	ب	ب
ג	ܓ	ܓ	ج	ج	ج	ج
ד	ܕ	ܕ	د	د	د	د
ה	ܗ	ܗ	ه	ه	ه	ه
ו	ܘ	ܘ	و	و	و	و
ז	ܙ	ܙ	ز	ز	ز	ز
ח	ܚ	ܚ	ح	ح	ح	ح
ט	ܛ	ܛ	ط	ط	ط	ط
י	ܝ	ܝ	ي	ي	ي	ي
כ	ܟ	ܟ	ك	ك	ك	ك
ל	ܠ	ܠ	ل	ل	ل	ل
מ	ܡ	ܡ	م	م	م	م
נ	ܢ	ܢ	ن	ن	ن	ن
ס	ܣ	ܣ	س	س	س	س
פ	ܦ	ܦ	ف	ف	ف	ف
צ	ܥ	ܥ	ع	ع	ع	ع
ק	ܩ	ܩ	ق	ق	ق	ق
ר	ܪ	ܪ	ر	ر	ر	ر
ש	ܫ	ܫ	ش	ش	ش	ش
ת	ܬ	ܬ	ث	ث	ث	ث
י	ܝ	ܝ	ي	ي	ي	ي
כ	ܟ	ܟ	ك	ك	ك	ك
ל	ܠ	ܠ	ل	ل	ل	ل
מ	ܡ	ܡ	م	م	م	م
נ	ܢ	ܢ	ن	ن	ن	ن
ס	ܣ	ܣ	س	س	س	س
פ	ܦ	ܦ	ف	ف	ف	ف
צ	ܥ	ܥ	ع	ع	ع	ع
ק	ܩ	ܩ	ق	ق	ق	ق
ר	ܪ	ܪ	ر	ر	ر	ر
ש	ܫ	ܫ	ش	ش	ش	ش
ת	ܬ	ܬ	ث	ث	ث	ث

of mere misapplications, referable to the ignorance of the die engraver, or to conventional modifications exaggerated in the hands of succeeding artists.

The local diversifications from the common standard will be best shown in the succeeding plates, where the name of the mint city will of necessity indicate the geographical site of the variant.

The second and third columns of characters, which follow the opening Hebrew line, consist of the fellow-alphabets common to the Bilingual Rock Inscriptions of Ardeshr̄ Bábegán and his son, Sapor I.¹ The several forms here given are reduced fac-similes of the original letters selected from the legends of Sapor's double inscription at Hájí Abád; of which the Royal Asiatic Society possesses actual impressions, in the shape of a reproduction of the plaster casts² taken from the rock itself by Colonel Sir E. Stannus, and now in

¹ The following résumé will put the reader in possession of a general view of the various Inscriptions of the Sassanids, as well as supply a concise list of references to the available publications on the subject.

ARTAXERXES I. *Ardeshr̄ Bábegán*. 223, A.D.

a. Bilingual Pehlvi Inscription, with Greek translation at Naksh-i-Rustam, explanatory of the associate sculpture (De Sacy, *Mémoires sur Div. Ant. de la Perse*, p. 62, etc.; pl. xxii. Ker Porter, 548). *Subject*: Artaxerxes receiving the *cydaris* or ancient diadem. (K. P. p. 555) from Ormazd after the defeat and death of Ardeván (De Sacy's identification of the figure to the right as Ormazd is proved by the now legible Sassanian Pehlvi).

SAPOR I. *Shápúr, son of Ardeshr̄*. 240, A.D.

a. Bilingual Pehlvi Inscription, with Greek translation, identifying the chief figure in the sculpture, (Ker Porter, pl. xxviii. p. 572) at Naksh-i-Rajah, as Sapor I. See De Sacy, *Mémoires*, p. 1, etc. and Rich's *Babylon and Persepolis*, London, 1839, pl. xii.

b. The two Pehlvi Tablets in the cave at Hájí Abád, near Naksh-i-Rustam (the record of which is yet to be translated), referring to Sapor, the son of Ardeshr̄, (Ker Porter, pl. xv. p. 513).

SAPOR II. *Shápúr, son of Hormus; grandson of Narses*. 310, A.D.

a. Sassanian Pehlvi Inscription near Kermánsháh, (Ker Porter, *Tack-i-Bostán*, vol. ii. pl. lxxviii, p. 188. Malcolm's *Persia*, *Ták-i-Boostán*, vol. i. pl. 3, facing page 258. The contents of the writing merely serve to identify one of the sculptured figures.

SAPOR III. *Shápúr, son of Shápúr; grandson of Hormus*. 384, A.D.

a. Sassanian Pehlvi fellow tablet to the last, and in its turn illustrating the identification of the second figure. See De Sacy, p. 211, *et seq.* *Mémoires*. Also, Second *Mémoire* on these Inscriptions, read before the Historical Class of the "Institut" in 1809. Printed in tom. ii. p. 162, *et suivantes*. M. Boré, *Journal Asiatique*, June, 1841; and M. Louis Dubeux, *ibidem*, an 1843.

² I am indebted to Mr. Norris, the Secretary of the Royal Asiatic Society, for my knowledge of the existence of these casts, which were obligingly pointed out

Dublin. It is to be mentioned that though this particular inscription—the most comprehensive we have—is as yet unread, being deprived of the advantage of any Greek translation, such as is usually appended to the other bilingual monumental writings, yet the preliminary names, titles, and expressions are so nearly identical with those in certain similar inscriptions deciphered by M. De Sacy, that we can be at no loss to recognise the true value of the majority of the letters in each: some of those not so clearly made out, or not accurately rendered in form from the imperfect materials M. De Sacy had to rely upon, may demand a passing notice.

I commence with the second column of the Plate, exhibiting the alphabet of the leading language of these inscriptions, and which Major Rawlinson has proposed to denominate *Parthian*, but which, judging from the analogy of its literal forms and probable derivation, might be more properly entitled Chaldæo-Pehlvi, or, looking to the locale of its dominant use, might with equal fitness be designated Persepolitan-Pehlvi.

Of the nineteen letters apparently susceptible of individualization, twelve [1 א, 2 פ, 3 ת, 4 ר, 5 י, 6 ש, 7 כ, 8 ל, 9 מ, 10 נ, 11 ה, 12 י] were so accurately placed by De Sacy in their proper positions in the orthography of the inscriptions, that, although occasionally the correct outlines of the figures were strangely distorted, we must still acknowledge that we really owe their first identification to him. So also with the 7, whose distinguishing mark he failed to detect; but he at the same time assigned to it its right location in the words he read, its right sound in correspondence with its Hebrew equivalent, and even its distinct shape, failing only in that which he had no power to amend—the imperfection of the drawings upon which he had to base his

by him as likely to assist in the elucidation of the particular subject of this paper. Mr. N. had already occupied himself in the transcriptions and comparisons preliminary to a complete decipherment of these monuments, and in the most liberal manner proposed to allow me the use of the materials he had collected. This I for many reasons declined, preferring to work independently from the available fac-similes, which, as has been already shown, were sufficiently introduced for all general palæographic purposes by De Sacy's publications. As I have gone on with my own designedly limited examination of the documents in question, I have at all times freely compared notes with Mr. N., who in most instances is prepared to coincide in my notions. In thus expressing my obligations to Mr. Norris, although I am unable to acknowledge any distinct identification as derived from him, I need only mention his name in connexion with the above facts to show the readers of the *Journal of the Royal Asiatic Society* how much advantage I must necessarily have derived from so ready an access to his varied learning and critical judgment.

decipherments. Of the remaining six letters, I cite without any reserve the 𐭪 and 𐭫, which are sufficiently obvious in the forms afforded by the exact copies we have at command; and I have no less faith in the identification of 𐭬, for which I have given full reason in another place¹. The 𐭭 admits of some doubt; and the two letters given as uncertain, must for the present be allowed to remain so.

The third column in the Plate consists of the characters of the Sassanian Lapidary Pehlvi, the corresponding vulgar version, as I understand, of the prefixed Chaldæo-Pehlvi just referred to. M. De Sacy made much greater progress in the assignment and true definition of the figures of this alphabet than he was able to do with its associate Pehlvi; and as this system of writing has since been the subject of examination in other places, and received more perfect illustration from the extensive currency of its own derivatives, we can appeal with greater confidence to the conclusiveness of the results now given. The only letter in the list to which corresponding values are attached that has hitherto remained at all doubtful is the 𐭮. As I have already had occasion elsewhere² to explain my reasons for adopting this identification, I will not detain my readers in this place, but simply repeat that I have full confidence in the assignment.

Of the two Sassanian letters classed as uncertain, I would refer for a moment to the first, which has been rendered by De Sacy as *mn*. Now, although this attribution is easily shown to be erroneous, we are still in no position to supply the necessary correction which should embrace a more satisfactory determination of its real value. I may notice that the Chaldæo-Pehlvi letter placed immediately over the Sassanian fac-simile in the Plate is the usual correspondent of this character in the other text of the inscription.

The second and third outlines placed among the uncertain Sassanian letters are faithful copies of the only two examples of the letter in question that we have in our plaster casts of the inscription³; in each case the form occurs as the fifth letter in the word read by De Sacy as 𐭮𐭬𐭫𐭮𐭫⁴; and upon this rendering, the character has up to this time retained among Orientalists the then assigned value of *s*. M. De Sacy, at the same time, gave the orthography of the analogous

¹ Num. Chron., London, 1849. Oriental Legends on Parthian Coins.

² Ibid.

³ We have only the six opening lines of the Sassanian transcript of the Hâjî Abâd Tablets, but the leading Chaldæo-Pehlvi text is entire in our plaster impressions.

⁴ De Sacy, p. 108.

word in the associate Chaldaeo-Pehlvi text as כורסן, which now, however, in our indubitable copy, proves to be כורין; the question has therefore arisen, Is it not possible that the Sassanian 𐭪 of De Sacy may also be a 𐭪, or some compound holding a 𐭪 in combination, instead of the hitherto received 𐭪? The linear configuration of the character has much of the appearance of 𐭪; and there are some further arguments in favour of such an assignment¹; but, on the other hand, I am aware that the more modern form of 𐭪 in these Pehlvi alphabets bears very much the appearance of having grown out of such an original as that we are now examining; and as the 𐭪, be it of what form it may, is a letter of but rare occurrence in the inscriptions, I must leave the matter for the present undecided, though any reliable copy of the Kermánsháh Inscriptions giving the name of Narses would perhaps definitively settle the point.

The fourth column of the accompanying table displays a set of the Sassanian numismatic letters, such as were in use shortly previous to the Arab conquest of Persia; these will be found to partake of the general identity of the previous lapidary character to a far greater extent than did their own numismatic predecessors. The majority of the forms are susceptible of ready proof from their own mere outlines, as traceable from the characters in the previous line, but some of the modifications may require separate comment.

To avoid the repetition necessarily attending a separate analysis of each alphabet in detail, it will be advantageous to embody such remarks as may offer, respecting the relative types of any given letter in this and the succeeding columns, under the definite heads furnished by the letters themselves in their alphabetical order. My observations will be brief, and merely occasional, as I rely upon the arrangement of the Plate itself sufficing to explain many points that might otherwise call for fuller illustration in this place.

The first letter requiring notice is the 𐭪, which offers a singular and somewhat unexpected modification of the lapidary figure to which

¹ The 𐭪 was a letter even then peculiarly liable to be compounded, as it may be seen among the usually isolated letters of both alphabets distinctly joined in the Chaldaeo-Pehlvi at Hájí Abád, connected by an additional cross-bar with the 𐭪 in this very word כורין; and in the Sassanian Inscriptions at Kermánsháh, the 𐭪 is invariably joined on to the succeeding 𐭪 in مزدیسنا [or مزدیسنا] and occasionally to other letters, where it was desirable to mark the suppression of the intermediate inherent short vowel *a*.

it corresponds. I would take this opportunity of observing that when this character is made to enter into combination with *a*, as *ay* *ach* on the coins, its distinct identity is usually preserved, and its shape is but seldom confounded, as in modern practice, with the *ay* *h*, which, in the existing system of writing, there are no means of distinguishing from one another. Passing over the two Arabico-Sassanian forms in col. 5, which show one step in the progressional modification of the character, we arrive at the modern Pehlvi correspondent (col. 6), which in its independent definition displays a considerable variation from its prototypes, though it retains much more of the identity of its previous outline in conjunctions that absorb its lower cursive termination, which of itself suffices to alter the general appearance of the letter somewhat deceptively: the three forms in the Neskhí column, given as equivalents, may excite a question; but I would remark that in all cases where I have had occasion to introduce more than one Persian letter as corresponding with the antecedent Pehlvi gradations of the character, my interpretations are supposed only to apply to the special alphabet (No. 5) drawn from the medals now about to be described. It is from this source I must derive most of my proofs, and it is to this literal series that I would particularly devote my space. I would take this opportunity to impress upon those who may not already have realized the idea, that, in citing the letters of the modern Persian alphabet in comparison or phonetic correspondence with their less numerous and less exact predecessors of the Pehlvi, I quote the simple fact, that in certain words on the coins, whose identity is sufficiently established, the given Pehlvi letter occupies the place subsequently taken in the more elaborated system of Neskhí writing—as the case may be—by one of the Persian letters noted as equivalents.

The number of possible Persian substitutes for the Arabico-Pehlvi *ع* might be extended beyond the three forms appended in the concluding column of the Plate, so as to embrace an optional employment of *ج* or *ج'*; but the *ج* I have adopted looks more appropriate, as giving the nearest approximate sound, considering that there existed an express sign for the *ج* (*س*). But under any circumstances great latitude is allowable in the association of the phonetic powers of the cultivated alphabet of later days with the indefinite

¹ Müller's *Essai*, p. 294.

and interchangeable values attaching to the earlier Pehlvi letters; and we need scarcely feel bound to submit to any very rigid rules in the elucidation of a system which itself is seen to have been so wanting in precision.

The figures, sixth in order in the fourth and fifth columns, are inserted only as guides to those who may seek, in the earlier systems of Pehlvi writing, the equivalent of the Neskhí خ, and not as in any way entitled to be considered as variants of an independent sign—being in effect mere combinations of the letters 𐭪 = x and 𐭫 = 3—and as such entering into the orthography of the majority of ancient Persian words now written with a خ, some only of which still retain the full power of the succeeding 3. According to the old method, where there was no following 𐭫 = 3, the 𐭪 = x alone sufficed for all that the alphabet possessed of the power since inherent in the Kufic خ: hence the simple Parsí 𐭪 = kh, which modern practice distinguishes from the normal 𐭪 = h by the addition of the dot.

The modification which the original Sassanian 𐭪 underwent in the hands of the die-engravers for the Arabs, seems to consist in the simple rejection of the upper curve of the previous figure 3. The omission of this portion of the character has a serious effect in increasing the difficulty of precise decipherment, inasmuch as it substitutes a form identical and convertible with a second letter ي, in place of the old unmistakable sign, which had but little community of outline with its fellow letters.

The character in col. 4, generally answering to an 𐭫, and equally serving as an 𐭫, was used in the lapidary alphabets of Persepolis to represent an 𐭫 only; in our progress onward, we find the letter 𐭫 employed in the unilingual inscription at Kermánsháh in the word ایران Airán—a name elsewhere invariably written with the true r—in the presence of the undoubted use of the character 𐭫 as l in Malka, and the simultaneous acceptance of the old 2 as both 𐭫 and 𐭫 [شهبوهري اوهرمزدي, &c.]. On the later Sassanian coins, the one symbol stood for either letter, and the Arabs followed this lead in retaining the commutability of the sign, while its form was subjected

to a degree of simplification which it may be said to retain to the present day, though the necessity of distinguishing the two powers inherent in the one character has eventually led to the *l* being marked by the loop in use in the modern Pehlvi, *ل*.

The *س* in col. 5 requires but slight comment, unless it be to note the serious obstruction to the intelligibility of the Arabico-Pehlvi legends, caused by its receiving the same shape as the *ح* = *ع* *ه* *خ*. The selection from among the five letters just cited presented a comparatively moderate difficulty; but to decide upon the intention attending the use of a common symbol representing optionally such diverse sounds as *s* and *a*, &c., adds considerably to the uncertainty otherwise attaching to all ancient Pehlvi decipherments.

The gradations and permutations of the *k* and the *g* in the various ancient systems of writing common to Persia, from the third to the seventh century of our era, present curious matter for the study of the palæographer. In the existing state of our knowledge, and working as I do almost exclusively from a single branch of evidence, I shall not presume to offer any very authoritative opinion on the subject, though I have some satisfaction in fixing definitively the form and value of the two lapidary *g*'s, which furnish us with a safe basis for subsequent comparisons. I have not yet met with a decisive example of the use of the *g* on the later Sassanian coins, but the *k* retains its previous lapidary form¹. Among the legends on the Arabico-Pehlvi medals I find the two varying outlines of *k* bracketed in the plate under the joint heads of *k* and *g*; the ancient Sassanian *k* is here completely lost sight of; from this and other reasons, an impression has arisen with me that the *k* under the form in use among the Arabs may possibly prove to be a modified outline of the old *g*, which was then made to answer for both *k* and *g*, as the Arabic *Kaf Fârsî*. Whence the very Arabic-looking *ك* of the modern Pehlvi was derived it would at this time be rash to speculate; but the existing Pehlvi *ك* probably came from the forms immediately under review.

The next letter that demands attention is Müller's "grand Schiboleth du Pehlvi, le signe ۱", which, however, viewed by the new light he has thrown upon its history, is far less perplexing in its use

¹ I do not coincide with Major Rawlinson in his notion of the community between the *ك* and *و*. Journal Royal Asiatic Society, vol. X., p. 89.

among the coin legends, than the already cited convertible symbol standing for *a*, *s*, *h*, &c. It may prove a somewhat difficult task to trace accurately the progress of the development of the present form *l*, which now manifestly answers both to *n* and *w*, as it likewise can be shown to have done on the Arabico-Khusrú coinages. In certain cases evidencing provincial variations, or examples of the early transition from one style of writing to the other, the expected *Z=w* is found duly to hold its place, as does the form *l* still fulfil its ancient functions in representing the *n*. Descending, however, in order of date, the previous outline of *w* becomes obsolete, and we meet with an undoubted exhibition of a letter formed after the likeness of the old *n*, occupying the position of a *w* (in *wist*, &c.), while the proper sign for *n* seems to degenerate to the simple perpendicular line in present currency, into which in the next stage of modernization, the *w* readily follows it¹. Before taking leave of the degradation of the ancient *n* to the task of serving for a *w*, as well as for, or in some cases in supercession of, its own proper sound, I would notice that in certain cases the *u*, when rudely formed, is often fashioned after a deceptive similitude of the *n* or debased *u*, being rendered by two direct lines placed a given angle to each other (thus *∟*), which combination, did it not occur in an unquestionable case of the initial of *بنج* and in other equally indubitable examples, I should have now hesitated to quote.

The *e*, which concludes these alphabets, is easily traced through its progressional modifications; the successive changes are gradual, and, unlike some of the other letters, they offer no sudden or unexpected permutation. A question may I think be raised as to whether the *e*, in its use at the time of the Arab conquest, was not susceptible of phonetic duplication under the optional form of an *ه*, which in effect, in its own literal development is a mere figure of two *e*'s conjoined. We know that the Zend *ه* when doubled, represents *yy*, and the Pehlvi *ه* is found in many instances where it cannot but be read as *y* or *iy*, as in *زیات کیم* Ziyát, *میان* Miyán, &c., though the practice of modern Pehlvi authorities would give the reading

¹ The *u* would seem, in the more easterly provinces, to have preceded its subsequent associate into their common present state, inasmuch as I occasionally find *n* in *Nuh* with the back tail-stroke, while the succeeding *u* presents the simple perpendicular line.—See Coin 25, *infra*.

ماں زات , &c. The position the Pehlvi *e* is found to occupy as an adjunct to the *a*, forming *ae*, also favours the supposition of the optional divisibility of the component parts of the *a* itself.

On this occasion of the first use of Pehlvi type in English printing, it may be incumbent upon me to introduce, in some detail, the Alphabet now adopted, as well as to advert briefly to the source whence I have derived the fount employed to illustrate the different examples of the ancient Persian language cited in the following pages.

The Dies for this elegant Pehlvi alphabet were cut by Marcellin Legrand, in 1839, for the Société Asiatique of Paris, under the superintendence of M. Jules Mohl, and have up to this moment been but once employed—to print Müller's *Essai sur la Langue Pehlvie*, for which they were expressly prepared.

In process of time the punches, matrices, and the greater portion of the existing type, passed into the possession of the Imprimerie Royale; and as the direction of that institution neither lend, give, nor sell, the advantages otherwise derivable from the production of such extended facilities towards the study of the language by the Société Asiatique were in effect confined to French savants, or foreigners appearing under their auspices. During a late visit to Paris, however, I was so fortunate as to meet with a small fount ready prepared to my hand¹, which had been cast before the matrices had become the property of the present would-be monopolists; and whatever use may hereafter be made of this means of representing the Pehlvi language in its own proper letters, I may remark that the Journal of the Royal Asiatic Society has already felt the want of this type in Major Rawlinson's erudite Memoir; and however much some of my readers may dislike the sight of so utterly strange a character, I myself have full reason to rejoice at escaping the indefinite and unsatisfactory medium of Roman orthographies, or, in this case, the scarcely less perplexing vehicle of the elaborated symbols of the existing Persian alphabet as modified and amplified from its Pehlvi basis by subsequent contact with the more copious Kufic forms of the Arabs.

I desire, in the first instance, to exhibit the Pehlvi alphabet, with all its modern transformations and diacritical distinctions, such as became necessary in the progress of orthographical refinement, to

¹ This is now safe in the possession of Messrs. Harrison and Son, St. Martin's Lane, the printers of the Journal of the Royal Asiatic Society, who freely backed my purchase.

place a literal series, consisting originally of seventeen letters, on anything like a par with the more perfect Neskhí, numbering thirty-two phonetic symbols. The individual letters in Anquetil's list amounted to twenty-four¹, and the alphabet lithographed at Bombay signalises no less than thirty-three distinct forms², often giving three varying Pehlvi characters as corresponding to a single Neskhí letter, the recognised total of these last only reaching twenty-four, including a palpable Indian combination $\text{ñ} = \text{ن}$ or ته . Mullah Firúz also adopts thirty-two different signs as necessary to form a Pehlvi alphabet.

I need not however pursue these comparisons further; it will be sufficient to say that the following list will be found to contain all the simple letters.

1	ا	آ	A	12	و	ك	K
5	ب	ب	B	13	ق	گ	G
3	ت	ت	T	14	ل	ل	L
4	ج	ج	J	15	م	م	M
5	خ or ن	خ	KH	16	ن	ن	N
6	د	د	D	17	و	و	W
7	ر	ر	R	18	ه	ه	H
8	ز	ز	Z	19	ي	ي	Y
9	س or د	س	S	20	چ	چ	CH
10	ش	ش	SH	21	پ	پ	P
11	غ	غ	GH	and ای AE, which can scarcely claim a separate identity.			

As the isolated letters of the alphabet are subject to extensive modification, in their contact and interjunction with their fellow characters, I annex an explanatory list of the different groups I may

¹ I reject two of his *three* $\text{و} = \text{و}$, which are mere repetitions; his words are, "Son Alphabet est composé de dix-neuf caractères, qui ont un rapport sensible avec les Lettres Zendes, et qui donnent vingt-six valeurs; vingt-une consonnes et cinq voyelles." Zend Av., II. p. 426.

² Taking $\text{و} = \text{و}$ and $\text{و} = \text{و}$ as separate letters.

possibly have to use in the following pages, premising that I propose to shun all diacritical points, my object being to represent as closely as possible the actual legend I transcribe; and for this purpose I adhere, as nearly as circumstances will permit, to the original forms of the letters. The diacritical marks, which might be necessary to the understanding of the exact power represented by a convertible letter, will be supplied by their more appropriate use in the Neskhí transcript which accompanies each Pehlvi word. In the subjoined table I give only one of the many interchangeable readings allowable in the different compounds. Having annexed the various powers attributable to each individual letter, in the first instance, I take advantage of the power of simplification this allows me to give only a single set of equivalents to each group, even irrespective of phonetic probabilities, taking uniformly my first standard Neskhí letter, and leaving the selection from the interchangeable values to be determined by the context wherein the different combinations may chance to occur. It will be seen that I only admit fourteen different normal forms as composing the entire alphabet, including the **غ**, which I have not as yet met with either on coins, gems, or inscriptions.

- | | | |
|----|---------|---|
| 1 | خ ه ا ه | A, H, H, KH |
| 2 | ب | B |
| 3 | ث ت م | T, TH |
| 4 | ر ل | R or L |
| 5 | ز | Z |
| 6 | س د | S and ط , which I do not use |
| 7 | ش | SH |
| 8 | غ | GH |
| 9 | ك | K |
| 10 | م | M |
| 11 | ن و | N or W |
| 12 | و | answers to دى, and to judge by mode
answer to گ and ج . |
| 13 | چ | CH: at times convertible as ج and ز . On coins
it also serves for ص . |
| 14 | پ | P or F |

COMPOUNDS.

1	د	ا	8	ت	15	ت	د
2	ن	ا	9	پ	16	ن	د
3	ن	ا	10	ن	17	ن	د
4	س	ا	11	م	(18)	ن	س
5	ن	ا and اپ	12	ن	19	ن	ن
6	ن	ا	13	ت			
7	ن	ا	14	ن			

COINS OF THE LAST SASSANIAN MONARCHS.

Before introducing the Arabico-Persian coinage to the notice of our readers, it may be requisite to say a few words regarding the coins of the later Sassanian monarchs, who reigned immediately previous to the Arab conquest of Persia, and upon the types of whose money the Moslim currency was first based. Engravings of the last Khusrú coins have been published in so many accessible works¹ that it may be sufficient to refer to these delineations without entering upon any technical description of the forms and devices of the coins themselves. To the right of the head on the obverse will be found the Pehlvi name **خسروپ** or **هوسروپ**,² a constant characteristic of

¹ Ker Porter, Pl. lviii. fig. 8. Ouseley, Observations on some Medals and Gems, Plate No. 6, *Rám* (*Rám Hormuz*), Ann. 36, No. 7, mint and date doubtful. Longperier, Essai, Pls. x. 5., Ann. 26, and xi. 4. Marsden, Pl. xxix., figs. dxxxiii., dxxxiv., dxxxv., dxxxix.; Ann. 28, 27, 31, &c.

² It has remained up to this time somewhat of an open question whether the final letter of this name should be accepted as an **ي** or a **پ**: In the former case, it is necessary to understand the affix as the sign of the genitive, or as giving an adjective form to the word; in the latter rendering, the final letter becomes a portion of the name itself, and it is in this sense I am induced to receive it, from observing that in no instance in the later Sassanian medal series is the designation of the monarch made genitive, neither are the names of the Arab Governors, when expressed in Pehlvi, ever written with the concluding character in question,

many subordinate classes in the hands of the Arabs, whose imitations may generally be detected by the typical difference of the bust on the obverse, being executed more in outline than the same figure on the Sassanian prototype. The most important bearing these Sassanian models however have upon our Arab series, consists in the valuable introduction they furnish to the detail of the mint cities, and the information they afford regarding the system of numeration then in use, as distinguished from the more modern Persian forms, and by which many of the readings of the succeeding dates will have to be tested. It will be useful, therefore, to append a certain number of fac-similes of the former, (Pl. II., 1, 2, 3, &c.), and a concise Table of the latter, to illustrate these two points. In referring to this last, it will be remarked, that the early numbers from one to ten run uniformly after the Aramaic (Syriac) scheme of notation: the proper Persian series, here commencing with eleven, presents the peculiarity of prefixing the unit accessions to the higher numbers, twenty, thirty, &c., in the same manner as they are still used in conjunction with the lower numbers between ten and twenty—so that instead of the modern **دو بیست و دو** twenty and two, the combination was effected by **دو انرو بیست** two above twenty, in the same way as we at present say, **دو انده**, &c.

Having prepared the reader to expect certain obsolete forms of this nature, it will be unnecessary to pursue any recapitulation of the different points disclosed at large in the following Table.

unless it is required to connect the name of the individual with his patronymic. Besides this, may be cited the correspondence of the Hebrew and Armenian orthographies of the name, which give severally **חושריה** (Ouseley, p. 25,) and Khosrov (St. Martin, *Arménie*, I. 412.) And finally the method of writing the name in cursive Pehlvi, as quoted by Major Rawlinson, (**𐭪𐭥𐭥𐭥𐭥**) seems to set the matter definitively at rest. Ouseley, *Medals*, &c., p. 25, and Longperier, *Essai*, p. 78, adopt the **ي**. Müller, *Jour. Asiatique*, vii., pp. 335, 342, Olshausen, *Num. Chron.* xi. p. 135, and Rawlinson, *Journ. R. A. S.* x., prefer the **ب**. I must not close this note, referring to the word Khusrú, without citing M. Olshausen's testimony of the credit due to Sir Wm. Ouseley for the first identification of this name. "He was the only one until that time (1801), who had succeeded in deciphering a word in the Pehlwie character." *Num. Ch.*, xi., 136.

TABLE TO ILLUSTRATE THE SYSTEM OF NUMERATION
IN USE AMONG THE LATER SASSANIANS.

Ann.		Ann.	
1	وحت ۱۴	20	ویست ۱۰۰۰
2	تربین ۲۰۰	21	یازدست ۱۰۰۰۰
3	تلتا ۳۰۰۰	22	دوازدهست ۱۰۰۰۰۰
4	اربعا ۴۰۰۰	23	سیزدهست ۱۰۰۰۰۰۰
5	خمشا ۵۰۰۰۰	24	چهاردهست ۱۰۰۰۰۰۰۰
6	شتا ۶۰۰۰۰	25	پنجدهست ۱۰۰۰۰۰۰۰۰
7	شبا ۷۰۰۰۰	26	ششدهست ۱۰۰۰۰۰۰۰۰۰
8	ثومنا ۸۰۰۰۰۰	27	هفتدهست ۱۰۰۰۰۰۰۰۰۰۰
9	تشا ۹۰۰۰۰۰	28	هشتدهست ۱۰۰۰۰۰۰۰۰۰۰۰
10	اسرا ۱۰۰۰۰۰۰	29	
11	یازده ۱۰۰۰۰۰		
12	دوازده ۱۰۰۰۰۰۰	30 ⁵	سیه ۱۰۰۰۰۰۰
13	سیزده ۱۰۰۰۰۰۰۰	31	یازده ۱۰۰۰۰۰۰۰۰
14	چهارده ۱۰۰۰۰۰۰۰۰	32	دوازده ۱۰۰۰۰۰۰۰۰۰
15		33 ⁶	سیزده ۱۰۰۰۰۰۰۰۰۰۰
16	شانده ۱۰۰۰۰۰۰۰	34	&c., as in the twenties.
17	هفده ۱۰۰۰۰۰۰۰۰	40	چهل ۱۰۰۰۰۰۰۰۰۰۰
18		44	45, 46, 47, as in the thirties, &c.
19	نوزده ۱۰۰۰۰۰۰۰۰۰	49 ⁷	نوزده ۱۰۰۰۰۰۰۰۰۰۰۰۰

[N.B.—The numbers omitted have not been met with. I quote only what I have authority for.]

¹ The **ه** in these cases answers to **ع**. I have retained the most simple form in my Neskhî transcripts.

² And **خشى** **مهدود** at times.

³ I retain the **ر** as the equivalent of **ه** in this place, in preference to the more strict rendering of **ج**, (Müller, p. 294; Jour. Asiatique, "il exprime alors le **ه** (لا) ou **س** (ن)";) though I acknowledge only one original Pehlvi standard **ه** = **ج**, which in modern Persian transcriptions is frequently replaced by **ج**, **ر**, and occasionally by **ن**; notwithstanding that there is the express letter **س** answering to this last; in these cases the **ج** would probably be the most appropriate letter to use in reference to ancient articulations, but the **ر** now preferred makes the Neskhî transcript look less strange to modern associations.

⁴ 14 is also written **چهارده** **مهدود** and **چهار و ده** **مهدود** on a coin from the **مهدود** mint.

⁵ The **و** **ی** in thirty is often omitted.

⁶ I find 33 written **سسیده** **مهدود** on a coin, with the mint mark **مهدود** **دینار** or **دیوان**.

⁷ This might perhaps be read as **نوانر سه**; but the above is preferable, as it coincides with the Bismillah coin A.H. 49, Beiza; and the **سه** though indeterminate in the present case, corresponds closely with the same word in the A.H. 48, Bismillah coins, which cannot by any possibility be rendered **سیده**.

References to fac-similes of different numbers:— Plate II., fig. *a* = 1, fig. *b* = 2, fig. *c* = 3, fig. *d* = 4, fig. *e* = 5, fig. *f* = 35, fig. *g* = 7, fig. *h* = 8, fig. *i* = 11, fig. *j* = 17, fig. *k* = 16, fig. *l* = 32.

M. de Longperier places the Sassanian monetary standard of the silver pieces at 79 grains¹, but this weight does not by any means appear to have been sustained under the later monarchs of the race, when the imperial authority was perhaps less implicitly acknowledged in the departmental divisions of the kingdom than it had been under the earlier sovereigns, who instituted and enforced the original currency scheme. An exact examination of the weights of the coins of some of the later Sassanian kings gives no higher an average than 58.46 grains². For the early Arab period, I am inclined to avoid any attempt at generalization, and to follow the assertion of the *Tárikh-i-Guzidáh*, to the effect that previous to the definite determination of the standard in 76 A.H. the system of each city was independent and subject only to its own laws³; this statement receives confirmation, both from the apparent variation of the average weights and seeming purity of metal of coins emanating from different mints, and from the constant appearance of *contremarques* bearing the name of a second and frequently proximate city, which can only be supposed to have been employed to recognise the intrinsic value, and intimate the legal currency of the piece thus stamped in the city and district whose name appears on this adoptive seal.

To advert for a moment to the Sassanian abbreviations of the names of their mints, it will be seen that, though often crudely fashioned and less uniform in their outline than the same monograms under Arab treatment, the Sassanian originals possess a useful merit in the employment of larger and more defined letters, and a closer adherence to an alphabet, the value of whose individual characters is placed beyond dispute, by its preservation in the bilingual inscriptions on the rocks at Naksh-i-Rustam and Hájí Abád. These monograms

¹ "Le système monétaire des Perses sous les Sassanides était, pour l'or, l'emprunt de l'*aureus* romain; pour l'argent, l'adoption de la drachme attique," p. vi.

"J'ai cru pouvoir en inférer que le poids normal des monnaies d'argent Sassanides était de 79 grains," p. 7.

² Average of 26 coins in the British Museum, Hormusdaz, Varahrán, &c., and 9 Khusrus bearing low dates ($1520 \div 26 = 58.46$.)

³ بفرمان عبدالملك در سال هفتاد و ششم زر و نقره

كم عيار ده هفت مسكوك کردند قل هو الله نقش سكه بود
بيشتر از و در عرب زر و نقره مسكوك نكرده بودند اهل عجم را
سكه بقرسي و بهلوي بود و اهل روم و مغرب را برومي و عيار هر

شهري بنوعي ديكر بودي عبدالملك با يك عيار آورد

Tárikh-i-Guzidáh, MS., E. I. H., No. 180, p. 101.

will be noticed more in detail in their appropriate place in the section devoted to the classification of the mint cities of the Arab conquerors of Persia.

THE PURELY INITIATIVE, IMITATIVE COINAGE OF THE ARABS FROM A.H. 18 TO 43.

We gather from the concurrent testimony of the early Arabic authors, that the Hijrah cycle was only instituted, and simultaneously introduced into official use, by Omar, in the 17th year after the Flight¹. At this time, Omar was engaged in the formal arrangement of the many important governmental details incident to the demands of a section of an empire newly-received by a race in a state of comparatively backward civilization, from the hands of a dynasty, whose institutions displayed all the perfection of a long established monarchy, under rulers of no ordinary merit in the conduct of the internal economy of their State. Among other matters, which in the ardour of conquest had hitherto been allowed to lie over, was the determination of the currency to be issued by the Arabs for the use of their Persian provinces: and it was thereupon decided to adhere to the Sassanian fire-worship devices of the coins already in circulation, some slight subordinate marginal additions being made to the usual superscriptions to mark either the designation or the faith of the foreign conqueror. This modification is affirmed by Makrisi² to have

¹ Price, vol. I., p. 126.

² Makrizi, Ed. O. G. Tychsen, Rostochli, 1797.

"Quam modo allatam de pecunia Arabum gentiliū respectu eleemosynæ, et de ejus in Islamismo confirmato usu, legatus divinus legem fecerat, *Abubeker Alzaddik* (justus) fel. mem. ejus successor intemeratam servavit. Cui succedens *Abu Hafez Omar b. Alchettab* f. m. Ægypto Syria et Iraka expugnatis, de pecunia nihil constituit, sed eam statu suo usque ad annum Hegiræ XVIII, chalfatus sui VIIIvum, esso jussit. * * Tunc temporis *Omar* f. m. ipsas eas drachmas ad sculpturam persicam earumque formam, eo tamen discrimine cudi fecit, ut partim: *laus sit Deo*; partim: *Muhammed est legatus Dei*; partim: *non est Deus nisi Deus unicus*, et in lemmate: *Omar*, iis inscriberet, et decem drachmarum pondus sex Methkalia constitueret. *Osman f. Asan* f. m. in principem fidelium electus, numos cum epigraphe: *Deus est maximus*, durante chalfatu suo edidit."—pp. 77, 79, 80.¹

"Tria eduntur judicia, quis primus numos percusserit. Judex quidem *Abulhasan f. Muhammed Alkawardi* auctor est, *Omarem f. Alchettab* f. m. perspecta drachmarum diversitate, quarum aliæ scil. Baglienses VIII: aliæ sc. Tiberienses IV; Magrebbinæ (Mauretanicæ) III Danekis; Iemenenses I Daneko constabant, dixisse: *attende ad usualium drachmarum vel meliorem vel viliorum conditionem*, et collato Bagliensium et Tiberiensium drachmarum XII Danecorum

been effected in A.H. 18—an assertion we have no reason to doubt, though there may be some cause to question the exactitude of his statements regarding many of the minor epigraphical adjuncts, which he reports to have been introduced at this period.

It is assumed, and will probably be readily conceded by all who examine the question, that any fire-worship coins which bear Kufic legends, having reference to the religion of Mohammed, or indeed, seeing what is susceptible of proof regarding the origin and introduction of the Kufic system of writing, any coins bearing Kufic letters at all, must of necessity have formed part of an issue achieved under Moslem auspices. We may therefore proceed with confidence to quote any coins superscribed with the words **بسم الله** [*in the name of God*] as unquestionably of Arab origin. The earliest medal impressed with the name of Khusrú, thus signalized, bears date **دزد** Yezd, Ann. 28, which, taken as Anno Hijeræ, brings the coinage of the piece under the reign of Othmán; but a still earlier Pehlvi-Kufic medal, of a hitherto unrecognised type, is found with something like the name of Yezdegird, the last of the Sassanian monarchs, and is dated Yezd, ? Ann. 20, that is, during the Khiláfat of Omar, and but shortly after the first revision of the previous mint system, and the introduction of the practice of adding Kufic words to the original Pehlvi legends. A list of the various B'ism'illah Pehlvi coins at present known, with their several dates and places of mintage, will be found in the annexed Table, as prefatory to which, however, it may be requisite to describe briefly the new Arabico-Khusrui type.

Silver. Weight, 57·5 gr. (Six specimens:—1 British Museum, 2 Masson, 3 General Fox).

Obv. Left. **دزد** **افزود** for **افزوت**
 Right. **دزد** **یَزْدَگَرْت** or **یَزْدَکُوت** (in the older form of Sassanian characters. See fig. 21, Pl. II.)

Marg. **بسم الله** (Pl. II., fig. 22.)

Rcv. Left. **دزد** **ویست** = 20 (A.H.)

Right. **دزد** **یَزْدَگَرْت**

(See Pl. II., figs. 23, 24.)

pondere, dimidium ejus, scil. sex danecorum drachmas elegisse; negat tamen Abu Muhammed Hassan f. Abulhassan Ali f. Muhammed f. Abdalmalec f. Algottân in tractatu suo de mensuris et ponderibus, hoc Omaris fel. mem. propositum fuisse, propterea quod in numerum suorum titulo nihil mutasset.”—pp. 146, 147. Price, quoting the *Rauzat al Safâ*, places the first issue of Arab money in A.H. 21; vol. I., p. 136. See also Habib al Sair, MS., East India House, No. 471.

I am by no means prepared to insist upon the attribution now proposed for this class of coins, as I find several apparent anomalies in the obverse and reverse dies, a necessary doubt attending the interpretation of the chief name, and certain historical difficulties in reconciling the date and seeming place of mintage. In regard to the first of these points, a reference to the legends copied in Pl. II. will show that the name on the obverse is for the most part expressed in the older form of Sassanian Pehlvi, and tried by this test, the first, second, and third letters answer satisfactorily enough to the transcription adopted above; the fourth character is more dubious, and at the period of the probable issue of the coin, was without doubt, generally employed to represent the value of either (.) or و; but we have already seen in the history of the intertransition of these letters that the و, u, and ج, r, held as their common symbol the earlier type of the character under reference; taking therefore the previous joint values of the figure which the older form of the opening letters would seem to demand, the sign now in question may be accepted as an unquestionable و or a possible ج. The concluding letter ن, has lost all pretence to antiquity, and appears under the same outline as the final in the more modern writing on the Reverse. The Pehlvi full stop or silent final mark ۞ succeeds the ۞ on some specimens, which evidences the completion of the word, and assures us that we need not look for any further imperfection due to the omission of requisite letters.

The letters which compose the legends on the Reverse will be seen to partake of the general character of the writing chiefly in use at the period of the Arab conquest, and this in itself constitutes a cause of suspicion in regard to the dissimilarity of the two sets of Obverse and Reverse legends which has been alluded to above. On the subject of the unsatisfactory nature of the decipherment of the name, enough has already been said, and in reference to the third head of our objections, it is to be noted, that if the **وبست** = 20, is to be taken to imply the year *twenty* of the Hijrah, and the mint monogram is rightly read as Yezd¹, there is an additional difficulty started in the fact, that the Mohammedans were not in possession of Yezd in A.H. 20². This however would offer no conclusive objection to the assignment above suggested, as we meet with far more remarkable instances of disregard of precision in the setting forth of dates, amid the subsequent examples of the adopted coinages of the early Arabs in Persia.

¹ This question will be examined in its fit place under the identification of the mint cities.

² Tabarī—Isfahān surrendered, A.H. 20—21. Ockley—Ahwaz and Khorāsān conquered about A.H. 21, p. 302 *old* edit. Price's authorities date the reduction of Khorāsān in 22, and Kermān and Fārs in 23. Price, I., 138.

TABLE OF DATES ON B'ISM'ILLAH COINS.

Date.	Name.	Date.	City.
28	خسروب مودار	هشت و بیست و نه - ۱۴۰۰	یزد دزد
32	Id. Id.	دوازده و سی و دو	زد
35	Id. Id.	پنچ و سی و نه	بیضا دزد
Id.	Id. Id.	Id. Id.	د
Id.	Id. Id.	Id. Id.	مزد
37	Id.	هفده و سی و نه (sic)	یزد دزد
48	Id. Id.	هشت و چهل و نه	یزد دزد
49	Id. Id.	نوه و چهل و نه	بیضا دزد
50	Id. Id.	پنجا و نه	بیضا دزد

I was at one time inclined to think that the class of coins, of which a list is to be found below, formed a portion of the Mohammedan Khusruï coinage—imagining that **عبد** might be read as **عبد** the “servant,” as it is so expressed in the Pehlvi correspondent of this Arabic word in **عبد الله**: and the idea was supported by the uniform absence of the term in the case of any coin for which an unquestionable Sassanian origin could be claimed; an additional coincidence, which seemed likewise to give weight to the identification, was to be detected in the occurrence of the same word, similarly placed, on the coins of Tabaristán, which have been attributed to an issue of a much later date under undoubted Moslem influence. My faith in the assignment, however, has been considerably shaken by the discovery of the date 14 on a coin cited below; and though this number has appeared in one solitary instance, and may well have been an error of the die-engraver, it militates so much against the conclusiveness of the general appropriation, that I merely give the subjoined coins as a class separated from their fellows by the appearance of **عبد**, without in any way at present claiming

for them an Arabic paternity. At the same time, it is to be added that there is no reason to confine the admission of an Arab origin to those Khusrui medals that are marked by some distinct Islamic adjunct, as it is probable that the majority of the earlier Arab issues were left to follow the normal type of the pure Sassanian money.

TABLE OF KHUSRUI COINS WITH عبد ید.

A.H.	Date.	Mints.	A.H.	Date.	Mints.
14	عبد ید	دو سر	28	.. ..	عبد ید
17	عبد ید	دو سر	31	عبد ید	عبد ید
23	عبد ید	دو سر	32	.. ..	عبد ید
24	.. ..	دو سر	35	.. ..	دو سر
25	.. ..	دو سر	37	.. ..	عبد ید
26	.. ..	دو سر			

Among the Khusrui coins calling for more particular remark I may notice:—

- (a). Masson, weight 58·5 gr., mint 35 هـ. Obverse area as usual. Margin, in imperfect Kufic, **محمد ولي الله**. Pl. II, fig. 20.
- (b). Mr. Stokes, weight 34 gr., 45 هـ ? which in the place of the usual **عبد ید** on the left of the Obverse field, has a star and the Kufic word **الله**.
- (c). Mr. Stokes, weight 53·5 gr., from the same mint, dated A.H. 47; has, in the same position, the star, followed by **الله**, which again is succeeded by the Pehlvi **کی**.

It might be supposed from this that the Kufic **الله** was merely an imperfect rendering of the Pehlvi **کی**; but the previous instance of the employment of the Kufic word, which Makrizi gives us full reason to expect, may be held to settle the interpretation.

- (d). Masson, Beiza, A.H. 47. Obverse as usual, with the marginal inscription **بسم الله * الملك**.

COINS OF THE ARAB GOVERNORS.

I. ZIAD BIN ABU SOFIAN.

Ziád bin Abu Sofíán, or, as he was with bitter emphasis designated by many, *Ziad bin Abeah* (زِيَادُ بْنُ أَبِيهِ) "the son of his father," was born in the year of the Hijrah, under circumstances which left some doubt, not unattended with associate imputations of scandal, regarding his exact paternity¹. In his advance towards manhood, he was early distinguished for his prominent abilities and striking eloquence; so much so, that during the reign of Omar, at a meeting

¹ The facts and details elucidatory of Ziád's parentage are variously related by different authors. Al Tabarí asserts

و معاويه و زيارت و كار و تدبير خویش همه بدو داد و نسبت او بپذیرفت و بفرمود تا او را زيارد بن ابی سفيان خواندند و پیش از آن او را زيارد بن سمیه خواندندي و مادرش را سمیه نام بود و بنده هندی بود پس ابو سفيان با سمیه جمع شد و سمیه از او بار گرفت ابو سفيان از هندی برتسیذ و سمیه را بفروخت و آن خریده سمیه را آواز کرد و زيارد از بس بیع بسد ماء پیامد و سمیه گفت که از ابو سفيانست و هم به ابو سفيان بماند [مانست "Al"] ابو سفيان منکر شد که از من نیست بش زيارد بزرگ شد و معاويه دانست که آن چگونه است

The statement of the *Rauzat al Safá* puts a less creditable appearance on the origin of Ziád. This may be consulted in its main details as reproduced by the *Khalasut al Akhbar*, and translated by Price, vol. I. 380. Ockley also (p. 359, Bohn's edit.), unfortunately without quoting his authority, gives a somewhat varied version to the following effect:—"Abu Sofian, in the days of ignorance, before drinking wine was made a sin by the Koran, while travelling in Taif, put up at a public house. Here, after drinking somewhat freely, he lay with this Ziad's mother, Somyah, who was then married to a Greek slave." Ibn Kotaibah mentions two different versions of Ziád's birth, but neither of them support the imputations above noticed.

of "*the companions*" of the Prophet, he became the object of such conspicuous attention as to draw from Amrú the noted expression, that "had the father of this youth been of the family of Koreish, he would have driven all the Arabians before him with his walking-stick". The fruit of his subsequent career did not belie its early promise. His first public appointment would seem to have been during the khiláfat of Alí (A.H. 38), when he was nominated by Abdullah Abbas as his temporary representative in the government of Busrah¹. In the year following he was constituted by Alí Governor of Persia, the duties of which post he conducted with such salutary effect as to entitle himself to the admiration of those, generally least satisfied, but most competent to estimate the palpable advantages of his rule, the governed themselves, who were only content in likening him to their then and since paragon of kingly perfection, Noushirwán the Just². Zíád continued to administer the supreme power in this kingdom until the accession of Moavia³, and though he refused at first to acknowledge the title of the new Khalif, he was ultimately (A.H. 44) induced to do so, being subsequently rewarded by the recognition on Moavia's part, of his right—hitherto gravely questioned—to style Abu Sofíán their common father⁴. In A.H. 45 Zíád was deputed to correct the irregularities prevailing in the district of Busrah⁵, which, under too mild a governor, had become somewhat flagrant. Here his well-timed, though startling, severity soon reduced his new subjects to implicit obedience⁶, and restored order and good government throughout the entire department⁷. Besides the lieutenancy of Bus-

¹ Oekley, 385; Price, I. 380.

² Oekley (quoting D'Herbelot), p. 324.

³ نریاد نامه کرد بعلي باين حال علي ولايت بارس بدو

داد نریاد ببارس شد و هه بارس فرمان بردار او شدند Tabarí

⁴ Oekley (quoting Abú Fedá), pp. 324, 325.

⁵ پس معاویه بشام شد و کار بروي راست بایستاد و اثر نریاد هه

ترسیذ که باصطخر بارس اندر قلعه شده بود و خواسته بسیار

داشت و ترسیذ که با کسی اثر اهل بیت بیخبر * بیعت کند

⁶ Oekley, 358.

⁷ Oekley, 360.

⁸ Tabarí, A.H. 46; Price, I. 381; Elmácin, p. 55.

rah, "Moaviah gave him those of Khorásán, Sejestán, India, Bahrein, and Amán, not unadvisedly; for the more he committed to his charge, so much the lighter to himself was the burthen of his government". To all these weighty charges was subsequently added the management of the important government of Kufah (A.H. 50²), Zíád being the first noble in whose person had been combined the responsibility of the superintendence of both Kufah and Busrah; and of such equal consideration do they severally appear to have been judged, that the Khalif's representative divided the year by a six-monthly residence at each metropolis³. Not satisfied, however, with the viceroyalty of all these kingdoms, in themselves constituting almost an empire, Zíád, shortly before his death, petitioned even for more, phrasing his application that "his left hand was occupied in ruling Persia and the rest, but his right hand remained unemployed, and would have Arabia⁴".

Zíád was carried off by the plague in Ramzán A.H. 53⁵, having fully merited the title of the greatest man of his age⁶. Though European notions might question his means and methods, but few will deny that his measures were well designed towards the ends in view, among the people with whom he had to deal; and though objection might be taken to his almost merciless severity on first taking possession of Busrah, it must be admitted to have been both successful in itself and generally foreign to his nature, if we may judge by the character he had previously gained in Persia.

¹ Ockley, 360.

² Price, I. 383; Ockley, pp. 366, 369.

³ Tabarí, &c.

⁴ Tabarí, &c.



⁵ Ockley, 368; Price, I. 384.


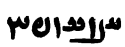
⁶ Ockley, 359.



Makrizi notices Zíád's share in the advancement of the Arab coinage to the following effect:—"Delato ad *Moawiah f. Sofian f. m. imperio*, Zeiadum filium patris sui Cufæ et Basræ præfecit, dicentem: o princeps fidelium, quum Abdal-Baleh Omar f. Alehettab princeps fidelium stipendiorum exercitui dandorum necessitate pressus drachmas comminuerit, et mensuram majorem fecerit, tu moduli melloris constitutione hominum progeniei votis magis respondebis, et subditis majus beneficium dabis, eorumque commoda, veram traditionem complens augebis. Quam ob rem *Moawiah f. mem. drachmas Alsaudas pondere deficientes scil. VI Danekorum, sive XV Keratiorum minus grano aut duobus, recudi fecit. Cudit quoque Zeiad (utriusque Irakæ præfectus) drachmas, quarum decem æquales erant VII Methkalibus, quas edicto usuales pronuntiavit. Moawiah quoque denarios imagine sua gladio cinctis insignitos percussit.*"—pp. 80, 81.










ZIAD I ABU SOFIAN.







No. 1. Silver. Weight, 42.0 gr.

Left Monogram¹.  and 

OBV. {  نریتات
 ابو سوفان

Marg. Kufic.  بسم الله وليREV. Left.  دوعولج  یانر پنجا A.H. 51.Right.   بيش (sic) for  بیضا

It may be necessary to justify this reading of the unit word, which at first sight looks like  نر "nine". There is, however, a very palpable variation from the usual form of  in the present instance, as the initial letter is joined at the bottom to the succeeding character; so that, unless the whole word be taken  for  *pro*  "one", which is improbable, or  *pro*  "ten," which is still more so, there is no choice left but to take  for  —a form in constant use on the previous Persian coins.

¹ I am anxious to call attention to the singular monogram, common to this and many subordinate classes of fire-worship coins, which up to this time has escaped any very close examination. But first, I would refer to the word , which, though subsequently associated with it, precedes their joint appearance. The first instance of the use of  occurs—in M. De Longperier's classification of the medals of the Sassanians—on a coin attributed to Khusrú I. (A.D. 531), whence it is continued on those of his successors, Hormusdaz IV. and Varahrán VI.; in these examples the word is placed close to the circle dividing the field from the margin of the piece, and commences directly below the star to the left of the figure. Upon the coins assigned to Khusrú II., a change takes place in the entire rejection of the star and the insertion of the monogram under consideration, between the line of the circle and the word . I may pause for a moment to observe, that this indication may possibly prove a safe means of discriminating the money of the two Khusrús. The monogram is subsequently used upon all classes of fire-worship coins, but it appears under so many varieties of form, that it is difficult to select a single example as a test of the whole. At times the component letters of the ciphers look more like the undetermined characters on the Khubus coins, at others, they seem nothing more than simple Pehlvi letters congregated into a single group, in which process they lose much of their distinct identity. Under these conditions, some may be read  , (possibly ) , &c.

No. 2. Silver. Weight, 61·0 gr.

Same types and legends, with the exception of the date, which is

سپنجا ۵۳ ا.ه.

No. 3. Silver. Weight, 58·0 gr. British Museum.

As above, with the date چهرینجا ۵۴ ا.ه.

No. 4. Silver. Weight, 31·0 gr. *Stokes*. (This coin is but little worn, though it may have been clipt.)

Obv. As above.

Rev. Date, A.H. 53. Mint city ۱۱؟

No. 5. Silver. Weight, 43·6 gr. British Museum.

Obv. As above.

Rev. Date, A.H. 54. Mint city سجدش؟

No. 6. Silver. Weight, 35·0 gr. Pl. II. fig. I.

Obv. As above; but more accurately engraved than usual, having the complete ۵۳ with the final ۵ distinctly expressed.

Rev. Left. ۵۳ سپنجا ۵۵ ا.ه.

Right. ۵۴ بصره Busrah.

ADDITIONAL PUBLISHED COINS.—M. Soret (*Lettre, Genève*) gives a coin identical with No. 2; and a piece of Zíád's is quoted by the same author from the Pietraszewski Cabinet, dated A.H. 52. The name of the mint city is not however mentioned.

II. OBEIDULLAH BIN ZIAD.

Of the many sons of Zíád¹, whose names have found a place in history, the most prominent was Obeidullah, who, inheriting in a high degree the general capacity and determination of his sire, seems by their means to have attained an equal, though less enviable, celebrity

¹ Ibn Kotaibah enumerates twenty-three. See passage quoted by Olshausen, p. 52, "Die Pehlwie Legenden."

in the annals of his day, his memory being loaded with the obloquy—exaggerated doubtless by sectarian virulence—due to his share in the destruction of the Imám Husein. Hence we find many Mohammedan authors, even while conceding to him full credit for his abilities and success, associating the mention of his name with the almost invariable adjunct of “the Cursed”.

During the year succeeding that which witnessed the death of his father, he was appointed by the Khalif Moavia¹ to the government of Khorásán², whence he ably led his troops beyond the Oxus, as far as Samarkand³. In A.H. 55⁴, Obeidullah was nominated Amír of Busrah, apparently retaining his previous charge by deputy until A.H. 56⁵, when Khorásán was bestowed upon Saïd bin Othmán.

After the accession of Yezíd (in A.H. 60), Obeidullah bin Zíád was selected by the new Khalif to conduct operations against the party and person of Husein the son of Alí, receiving letters patent for the additional governments of Kufah and Arabian Irák⁶, to enable him more effectually to carry out the Khalif's designs. It is not necessary to follow the prolix relation of the Persian writers regarding the fulfilment of Husein's destiny; suffice it to say, that the head of the son of Alí was shortly forwarded to Yezíd, who, imitating the brutality of his agent Obeidullah⁷, is reported to have displayed his triumph by smiting the then for ever silent lips⁸.

On Yezíd's death, in A.H. 64, Obeidullah hastened to secure himself in his position of Amír of Busrah, by persuading the people to elect him their protector⁹; but a similar proposition made to the citizens of Kufah meeting with less favour from that body, induced the men of Busrah to recall their act, and Obeidullah was obliged to quit his metropolitan city somewhat hastily¹⁰, and flee to Syria. Here, on the opportunity offering, he was mainly instrumental in the elevation of Merwán the son of Hakem to the throne of the Khalifs¹¹, and was himself invested with the title and honours of Generalissimo

¹ ملعون Tabarí, &c.

² Price, I. 384.

³ Ockley, 373; Price, I. 384; Tabarí.

⁴ Ockley, 373; Price.

⁵ Ockley, 374; Tabarí MS. Royal Asiatic Society.

⁶ Price, I. 412; Tabarí (he enters Kufah Z'ul Hajjah, A.H. 60).

⁷ Ockley, 410; Price, I. 396.

⁸ Tabarí.

⁹ Ockley (quoting MS. Laud, 161 A), p. 431.

¹⁰ Tabarí جون سك كركين

¹¹ Tabarí.

of the Syrian forces. In A.H. 65¹, Obeidullah—in the celebrated combat of Ainalwerd—routed and cut to pieces Solímán's army of Penitents². Being directed to proceed against Kufah, then in the possession of Mokhtár, he was met by the latter's General, Ibrahim, and defeated and slain in Moharrim 67 A.H.³

OBEIDULLAH I ZAID.

عبيد الله بن زياد *Arabice*

No. 7. Silver. Weight, 60·5. Stuart. British Museum. Unique.

Obv. Head as usual.

Right, { اوبيتالا
 ي زيأتان

Marg. بسم الله

Rev. Left. دراهم 45 or 45. A.H. 45.

Right. دراهم 45 for Dárábgird.

Marg. A monogram.

No. 8. Silver. Weight, 58·0 gr. Masson.

Has the same legends, with the date 45 ششویست
 as it reads, but which I imagine to be intended for 46
 for 46 شش شست A.H. 66.

No. 9. Silver. Weight, 64·0 gr. (Three specimens:—1 Masson, 2 General Fox.)

Obv. As above.

Marg. Contremarque

Rev. Left. دراهم 56 شش پنجا A.H. 56.

Right. دراهم 56 Yezd.


¹ Ockley, 451; Price, I. 296.


² Such was the name applied to "all those who confederated under him to revenge the death of Husein." Ockley, 447.

³ Ockley, 459; Price, I. 437.

No. 10. Silver. Weight, 50·5 gr. Masson. Pl. II. fig. II.

Obv. As above.

Rev. Left.  (imperfect) شش پنجا or possibly


 هشت پنجا

Right.  بیضا پیش for

No. 11. Silver. Paris, Bibliothèque Nationale.

Obv. As above.

Rev. Left.  هشت پنجا A.H. 58,


Right.  بصره Busrah.

Additional dates:—A.H. 59, weight, 64·6 gr.; British Museum: a second, Masson. A.H. 60, common, Masson, &c.; A.H. 64, rare, Masson. A.H. 68, common, Masson.

No. 12. Silver. Weight, 63·0 gr. Masson.

Obv. As above.

Rev. Left.  دوشست A.H. 62.

Right.  د ؟

No. 13. Silver. Masson.


Obv. As usual.



Rev. Left.  شست A.H. 60.

Right.  کرمانهفت ؟

No. 14. Silver. Weight, 45·5 gr. Unique. General Fox. Pl. II. fig. II/2.

Obv. As above.

Rev. Left.  سی شست A.H. 63.

Right.  کشان or  کشان

III. SELIM BIN ZIAD.

Selim, the son of Zíád—in virtue probably of his origin—was early in life entrusted with high honours and responsibilities, being invested, as he himself tells us, with the dignity of an Amír before he arrived at manhood¹. It is not stated at what exact period of his life he was first publicly employed, but he is represented to have succeeded to the charge of the province of Seistán and its dependencies simultaneously with his father Zíád's appointment to the government of Irák² (A.H. 50). In A.H. 61, Selim was nominated by the Khalif Yezíd to the superintendence of the important province of Khorásán, Seistán either remaining to him or being conferred anew³. He had scarcely taken possession of his fresh command when he entered upon a successful campaign against the Túrks, making himself master of the country of Samarkand, and pushing his victorious troops even to the gates of Khárisim, which eventually capitulated to the invaders⁴.

On the occurrence of the intestine struggles which distracted the Mohammedan empire immediately on the death of Yezíd (A.H. 64), followed by the hasty abdication of his son and momentary successor,

MS. 99, Royal Asiatic Society. ¹ که من آنر قبل مردي امير بودم

Ockley (quoting MS. Laud, 161 A) informs us that Selim was 24 years of age in A.H. 61 (p. 420). Supposing this to be correct, he must have been only 13 when first sent to Seistán.

² و چون وقت معاويه بود معاويه زياد بن ابی سفيانرا
ب عراق فرستاد و پسرش سلم بن زيادرا بسجستان فرستاد و
آن زمينهاي سند و هند که بسجستان پيوسته است بدو داد
و آن هم بوقت معاويه کشاده شد و هم بطاعت سلم بن

زياد آمدند MS. 34, Royal Asiatic Society.

³ Ockley (MS. Laud, 161 A), p. 420.

⁴ Price, I. 412; Ockley, 420.

و بمرود شد و انرجيكون بگذشت و با ترکان حرب کرد
و سغد سمرقند بکشاد و بدرخواسترم شد و يك سال آنجا بماند
و بآخر بصلح بکشاد MS. 34, Royal Asiatic Society.

Moaviah II., the people of Khorásán¹ voluntarily confirmed their allegiance to Selim, pending the definite decision of the question of the election of a Khalif. It does not appear very clearly from the statements of our available authorities on the point, how long this arrangement remained in force, but we find that Selim died at Busrah² at a period not very far removed from the date of these events³, leaving behind him a reputation not easily matched, and evidently deep-sunk in the hearts of the people over whom he had lately ruled, who are reported to have displayed their veneration for his virtues by perpetuating his appellation among their offspring, so that the name of Selim became common in the whole land⁴.

SELIM I ZIAD.

سلم بن زياد *Arabic*

No. 15. Silver. Weight, 58·5 gr. Very rare. Pl. II. fig. III. (Two specimens—Masson and General Fox.)

Obv.	Left.	س م	
	Right.	{ د ل و س م د م	سلم ي زياتان
	Marg.	بسم الله	
Rev.	Left.	ش ش پ ن ج ا	A.H. 56.
	Right.	د د	Yezd.

No. 16. Silver. Weight (average of 12 coins), 56·2 gr. Common.

Obv.	As above.	
Rev.	Left.	س ش س ت A.H. 63.
	Right.	م م ر و Merv.

¹ Ockley, p. 436.

² Ibn Kotaibah (Paris MS.) has only the following brief notice of Selim:—
سلم بن زياد فكنيته ابو حرب و كان اجود بني زياد و
ولي خراسان لينزيد و فيه يقول بن عراة ، عتبت علي فلما
هجتة ، و خالطت اقواما بكيت علي سلم ، و مات
بالبصرة ولد بهاعقب

³ Tabari. See note quoted under Abdallah Házim, p. 298.








⁴ Ockley, 437; Tabari, &c.

No. 20. Silver. Weight (average of 9 specimens), 56·7 gr. Common.

Obv. As above. Contremarques, as in No. 9 and 

Rev. Left.   for A.H. 67.

Right. Herát, as in the last coin.



Other specimens have the date written  ; and in one instance even  or  occurs (Masson). The generality of the Herát coins are badly executed. One coin (Masson) of this class, with the year  A.H. 63, has the remains of the name of its mint city thus indistinctly legible  Pl. II. fig. 15. On the margin, following the , is to be seen a word I have not been able to decipher.

No. 21. Silver. Masson. Rare.

Obv. As before.




Rev. Left.  



Right. 

General Fox has a second specimen, the date of which is also obscure; but which may be taken as intended for   67 or 68?

No. 22. (Two specimens.) British Museum.

Obv. As usual.

Rev. Left.  (No. 2,   A.H. 64.

Right.   See Pl. II. figs. 11, 12, 13, 14.

IV. ABDALLAH BIN ZOBEIR.

After the unequal battle of Kerbelah, in which Husein's pretensions to the Khiláfat were put an end to with his life (10th Moharim, A.H. 61), the provinces of Mecca and Medinah declared for Abdallah the son of Zobcir, and he was shortly afterwards proclaimed Khalif accordingly¹, his authority being for the time limited to Arabia, Yezíd still continuing to hold the rest of the Mohammedan empire. The latter did not long defer his attempts to reassert his supremacy over the land of the holy cities, sending an army against Abdallah, who was eventually besieged in Mecca, and reduced to much distress, when news was received of the death of Yezíd (Rabi al Awal,

¹ Ockley, 421, 434; D'Herbelot.

A.H. 64)¹, which event, in the then uncertain state of rightful order of succession, not only put an end to the siege, but produced an offer from the adverse general to recognise and support Abdallah Zobeir himself, and to lead him to the conquest of the whole [Moslim] world². From some strange and unaccountable infatuation, which remained with him to the last, he refused to quit Mecca, and the Syrian army returned to Damascus unpledged, and free to assist any competitor for the honours of rulership that chance or opportunity might produce. The Khilâfat of Syria and Palestine, after a brief interval, fell to the share of Merwân, while the rest of Mohammedan Asia acknowledged Abdallah Zobeir. Abdallah enjoyed this dignity—such as it was—for nine years, residing uninterruptedly at his ill-chosen capital, exercising a scarcely nominal control over the more distant provinces, many of which remained a prey to anarchy and confusion during the whole of his reign, and interfering but little with others ruled over by virtually independent chiefs, who perhaps had less objection to cite his name than that of a more directly powerful master. He was killed by the celebrated Hejâj bin Yusef, the General of Abdalmalik, in A.H. 73³.

ABDALLAH I ZOBEIR⁴. (Inedited.)

Arabic عبد الله بن زبير. Armenian ԱՊԷԼԱ.

No. 23. Silver. Weight, 51.0 gr. Very Scarce. Pl. II. fig. XIV.

Obv. Left. As usual.

Right.	{	عبد الله	اپدولا
		ذکر دوله	ی زو فیران
Marg.		عبد الله	بسم الله
Contremarque.		عبد الله	چولان
R.v. Left.		عبد الله	سشت
Right.		[؟ و (عبد الله) کرمانهنت و (عبد الله)]	

¹ Ockley, 427.

² بیاتاهم جهان ترا دهم عبد الله بن زبير گفت من اثر



مکه بدر نیایم حصین اثر او نومید شد و بانر بشام رفت. Tabari.

³ Ockley, 434; Price, I. 450.

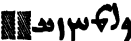

⁴ Makrizi. "*Abdallah f. Zobeir princeps fidelium Meccæ constitutus, omnium primus drachmas rotundas (titulis in orbem ductis præditas), quæ vero deformes, crassæ et resectæ fuerunt, percussit, quod nemo ante eum fecerat. In circuitu unius lateris insculpi curaverat: Muhammed est legatus Dei; et alterius: præcipit Deus observationem (fœderis) et justitiam.*"—p. 82.

No. 24. Silver. General Fox. Pl. II. fig. IV.

Obv. Area as above.

Marg.  and  only.  Contremarque 

Rev. Left. As above.

Right.  

V. ABDALLAH BIN HAZIM.

Of a chieftain, or chieftains, bearing this name, who flourished at or about the epoch required to correspond with the dates on our coins, we have several detached notices, though but little approaching to anything like a single complete connected biography on the one hand, or sufficient means of discriminating the different persons so designated on the other, as, from the strange currency given to favourite names among the early Mohammedans, it is perhaps hazardous to endeavour to identify the various phases of the life of any given individual, existing in such troublous times, amid such changing fortunes and such distant scenes of action as were open to the first Moslim commanders.

The earliest notice of an Abdallah bin Házim, at all suitable to our wants, is found on the occasion of the disturbances which took place in Khorásán in A.H. 31—32, when a chief of that name distinguished himself by suppressing the local revolt, even after his immediate superior had departed to seek succour, leaving the province in virtual possession of the insurgents¹. For this service Abdallah was rewarded by a post of some importance² in the executive government of the country.

Again, on the Khalif Moaviah's return to Damascus, in A.H. 40, an Abdallah bin Házim is appointed governor of that city³; but whether this, or either of these, was the same Abdallah bin Házim who subsequently became so powerful as effectively independent master of Khorásán, we have no obvious means of deciding. It is

¹ Price, I. 165.

² The Habib us Sair, quoted by Price, says, "The government [of Khorásán] was confirmed to him in consequence;" but there are doubts about the fact.

³ Abú Faraj, 123:—"Ipse (Moavia) Damascus reversus, præfecit (ei) Abdallam Ebn Hazem."

perhaps sufficient for all present purposes to say that written history records, and our medals in a manner confirm the fact, that Abdallah bin Házim was employed under Selim bin Zíád during the latter's tenancy of the government of the eastern provinces of Persia, and that shortly after the death of the Khalif Yezíd, in A.H. 64¹, Abdallah became one of the competitors for the possession of Khorásán, the whole of which—chiefly by absolute conquest from his rival lieutenants, previously nominated by Selim—eventually (A.H. 65)² fell to his undivided control, and held nominally for Abdallah Zobcír, but truly in virtue only of his own sword, was ruled uninterruptedly with no light hand until A.H. 72³, when the Khalif Abdalmalik, failing to gain his allegiance by fair means, was reduced to conspire with his recusant vassal's lieutenant, to deprive him of his government, which was only at last effected by the treachery of his followers, ending in a pitched battle, in which he lost his life⁴; the victor receiving the

¹ Price, I. 446.

² We gather incidentally the approximate date of the rise of Abdallah Házim's power in the statement of Tabarí, that he was occupied an entire year in the siege of Herát, after he had gained possession of the rest of Khorásán, and that Herát was captured in the year the Khwárij came to Kufah, i.e. 65. (Ockley, 451.)

و بآخ سپاه هراة هزیمت شدند * * و سیاستی اندر
خراسان افتاد که ندیده بودند و همان سال بود که خوارج بکوفه
آمدند و دعوی شیعه کردند و سپاه بر گرفتند و بشام شدند
حنانکه اندر عراق کس نماند

Tabarí, MS. 34, Royal Asiatic Society.

³ Price, I. 447; or A.H. 73, Ockley, p. 475.

⁴ Price, I. 447. Tabarí gives some curious particulars concerning Abdallah Házim's acquisition of Khorásán, which I transcribe from the Persian version of his work:—

و امیری خراسان از قبل یزید بسلم بن زیاد * * * بود
* * خبر آمد که یزید بن معاویه بمرد * * پس سلم
آهنگ شام کرد و مهلب بن ابی صفره را بر خراسان امیر کرد
* * و چون یزید بمرد فتنه در خراسان افتاد و سه امیر
آهنگ خراسان کردند سلیمان بن یزید و عمرو بن حازم و عبد الله

promised reward of his perfidy in the patent which gave him the temporary sovereignty over the subjects of the easternmost division of the Khiláfat.

بن حازم و سلیمان بن یزید چون نزدیک مرو رسید سلم پیش
وی باز آمد و گفت یا سلیمان کجا میروی گفت نزد تو تا
مرا بولایتی فرستی سلم گفت مروالروذ و طالقان و کوزگان
[MS. 34. کورگانان] و آن ناحیت ترا باد پس سلیمان مروالروذ
بنشست * * چون سلم بنشاپور رسید عبد الله بن حازم
پیش او آمد و گفت خراسان کرا دادی گفت مهلب را گفت مرا ده
جواب داد که بخارا ترا دادم عبد الله گفت من خراسان خواهم
سلم دانست که فتنه انگیزد گفت عهد من ترا بکار نباید که
من از قبل مریدی امیر بودم اکنون او بمرد عبد الله بدر
مرو آمد مهلب سپاه را کرد کرد و بحرب آمد عبد الله ایشانرا
بشکست و شهر بگرفت و غارت کرد و نامه کرد بهر شهری که
خطبه بنام من کنید و همه بکردند مکر سلیمان بن یزید

که با او جنگ کرد و او را بکشت [This passage varies in MS. 34.]

Royal Asiatic Society, MS. 99. * * و این عبد الله از مصر

بود و سپاه او همه عرب بود و خراسان بغلبه و شمشیر بگرفت
Royal Asiatic Society, MS. 33.


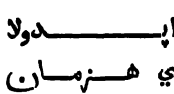
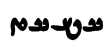



Ibn Kotaibah's notice of Abdallah Házim is confined to the following remarks:—






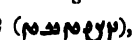
عبد الله بن حازم السلمي یکنی ابا صالح و امه سودا
یقال لها عجمی و کان اشجع الناس ولی خراسان عشر سنین
و افتتح اللبیین ثم ثار به اهل خراسان فقاتلوه

ABDULLAH I HAZIM. (Inedited.)




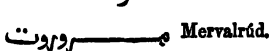
Arabice عبد الله بن حازم

No. 25. Silver. Weight (average of 29 specimens), 59.5 gr. Common.





Obv. Left. انزوت
 Right. {  
 Rev. Left.   A.H. 63.
 Right.   Merv.

Other specimens of the money of this Governor, minted at Merv, bear severally the following dates:—(a), A.H. 64 () , rare; (b), A.H. 65, rare, Pl. II. fig. V.; (c), A.H. 66, common; (d), A.H. 67, common; (e), A.H. 68, unique (General Fox); (f), A.H. 69—date variously written , , and  نویشست—common [one example of this coinage gives us a new Pehlvi reading of the name of Házim, thus ]; (g), A.H. 70, rare; (h), A.H. 72 () , rare; (i), A.H. 73, unique (General Fox).

No. 26. Silver. Weight, 62.5 gr. Very rare.

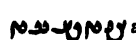

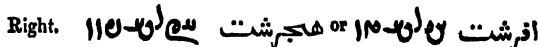
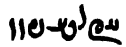
Obv. As above.
 Rev. Left.  
 Right.   Mervairúd.

No. 27. Silver. Weight, 57 gr. Unique.

Obv. As above.
 Rev. Left.   A.H. 63.
 Right.   Khubus.

The name of the Mint on this coin has been a good deal worn; so much so that I can scarcely rely upon the reading proposed. See Pl. II. fig. 17.

No. 28. Silver. Average weight, 62.5 gr. (4 coins, Masson).

Obv. As above.
 Rev. Left.  and  A.H. 67.
 Right.   Hazarasp? See fac-similes, Pl. II. figs. 11, &c.

Other specimens of this class of coins bear date—(a), unique (General Fox);
 هشتشت سنه ۳۰۰ هجرت ۳۰۰ for A.H. 68; in this instance,
 as in one of the preceding examples, the ۳۰۰, in both the annual date and
 the name of the city, are formed by the juxta-position of an ۳ and an ۰, thus—
 ۱۰۰ : (b), rare (Masson), ۳۰۰ سنه ۱۱۰۰ - ۳۰۰ نوشت A.H. 69.

No. 29. Silver. Weight (average of 8 specimens), 60·7 gr.

Obv. As in the preceding coins.

Rev. Left. هفت شست ۳۰۰ سنه ۳۰۰ A.H. 67.

Right. ۳۰۰ بس or بسا ۳۰۰

Other similar coins have the date ۳۰۰ سنه ۳۰۰ A.H. 68; and one
 specimen is stamped with the contremarque چلان for چلان ۳۰۰
Current.

VI. AUMAR BIN OBEIDALLAH.

In the absence of explicit historical data, there is some difficulty
 in satisfactorily identifying the individual whose name appears as
Aumar-i-Obeidárán on a considerable number of the available speci-
 mens of the early Arabico-Persian coins. The first hasty glance
 would probably lead to the supposition of Aumar's being the son of
 the notorious Obeidallah bin Zíád, who possessed such extensive
 power as Governor of Busrah, Kufah, and their dependencies, imme-
 diately previous to the date of the earliest piece in this particular
 class, which is seen to have been struck at Kerman in A.H. 65. This
 association is, however, readily shown to be inadmissible, as it is
 known that Obeidallah Zíád died (A.H. 67) without issue¹. In re-
 marking upon the dates and places of mintages of the remaining coins
 of this suite, it will be observed that the officer whose name is re-
 corded on their surfaces remained in uninterrupted charge of the
 cities represented by the monograms ۳۰۰ [Beiza, بیضا] ۳۰۰, and

¹ فقتل عبيد الله ولا عقب له وكان يوم قتل يوم عاشورا


سنة سبع و ستين
 Ibn Kotaibah.

No. 31. Silver. Weight (average of 7 specimens), 62·8 gr. Common.



Obv. As above.

Rev. Left.  هشت شست A.H. 68.

Right.  بیضا

One of these coins bears the contremarque , and a second is stamped جاتر

Additional dates on Coins of the same Governor and the same mint city:—

(a), A.H. 69, unique (Masson),  نوزده شست (b), A.H. 70, common,  هفتاد


The only two gold coins I have met with, of the early Arab Khusruf type, bear the name of Aumar i Obeidálá; both were coined at بیضا, and both are dated A.H. 70 (Prinsep, British Museum, weight 59 gr.; Steuart, British Museum, weight 67 gr.)¹.

No. 32. Silver. Weight (average of 4 specimens), 60·7 gr. Common.

Obv. As above.

Rev. Left. A.H. 68.

Right. 


Additional dates:—(a), A.H. 69  نوزده شست rare: (b), A.H. 70, common. •

No. 33. Silver. Weight, 49 gr. Masson. Rare.

Obv. As above.

Rev. Left.  ۶۹ = 69.

Right.  ۷۰ ?

Additional date:—A.H. 70, weight 61·5 gr. Obv. marg.  لله الحمد

A nearly similar coin is described by M. Soret, p. 12.

¹ "D'après une tradition, *Hercham ben (Mohammed) Kelby* (a. 204) avait dit : que *Mos'ab* n'avait pas seulement fait frapper de la monnaie d'argent, mais encore de la monnaie d'or." Fræhn (quoting Beladery), Jour. As. IV. 346.

VII. ABDALAZIZ BIN ABDALLAH BIN AMER.

We learn incidentally from Ibn Kotaibah that Abdalaziz, the son of the celebrated Abdallah bin Amer, was [once] Governor of Sejestán¹, and for the present it would seem that we must rest satisfied with this scanty notice of this officer as sufficient at all events to form a basis for the identification confirmatory of the unusually decisive reading proposed for the subjoined coins.

ABDALAZIZ BIN ABDALLAH AMER. (Inedited.)

Arabice عبد العزيز بن عبد الله بن عامر

No. 34. Silver. Weight, 61·4 gr. Prinsep, British Museum.

Obv. Left. As usual.

Right. { اپدولعزیز ی
اپدولا ی امیران

Marg. بسم الله العدي

Contremarque. جائز

Rev. Left. ۶۶ شش شست 66 A.H.

Right. دزد یـــــــزد

No. 35. Silver. Weight, 63·0 gr. Masson, East India House.

Obv. Left and Right as above.

Marg. As above. (No contremarque.)

Rev. Left. As above, 66 A.H.

Right. دزد یـــــــزد

¹ دولي عبد العزيز بن عبد الله بن عامر سجستان

Paris MS., p. 47.

VIII. MUSAB BIN ZUBEIR.

The historical facts and details of the public life of Musáb derive additional interest in the eyes of numismatists from the active part he is reported to have taken in the introduction and advancement of those improvements in the adapted currency of the Moslim Arabs, which were undertaken during the reign and under the auspices of his brother, Abdallah the son of Zobeir.

The first notice of Musáb, in the annals of his day, occurs on the occasion of his mission by Abdallah Zobeir to act against the Syrian Khalif Merwán; being encountered by the latter on his return from his successful Egyptian expedition, Musáb sustained a complete defeat (A.H. 64)¹.

In A.H. 67², we find Musáb deputed to the government of Busrah, where, being joined by that able commander, Mohalleb bin Abu Safráh, he proceeded to attack the celebrated separatist chieftain Mokhtár, at that time in independent possession of very extensive power³, and succeeded in putting his forces to the rout near Kufah; Mokhtár himself, with six⁴ thousand of his followers, taking momentary refuge in the citadel of that town. On the surrender of this body, after the death of Mokhtár, Musáb, though in his own person apparently disposed to mercy, was induced, by the urgent representations of the Kufians—their fellow citizens—to have the whole number put to the sword.

During the course of the year 71 A.H., Abdalmalik—the then Syrian Khalif—having at length succeeded in placing affairs upon a comparatively satisfactory footing in his own immediate provinces, advanced to the conquest of the rest of Moslim Asia, duly preparing the way—as but too frequently was the custom among these leaders of the Faithful—by treachery. His first and most formidable opponent was Musáb, whom he found, supported by a relatively small force, at Masken, and already labouring under the disadvantage resulting from the defection of an important section of his army, which had been brought over to the Syrian interest. Notwithstanding the inequality of his own troops, Musáb determined to engage, refusing even the proffered terms that were proposed in but little of a hostile

¹ Ockley, p. 436.

² Ockley, 460; Tabarí.

³ Price, I. 435:—"Kufah, Hejaj, Persian Irak, Egypt [?], and Diarbekir,"

⁴ Price: Ockley says 7000?

spirit when, in the progress of the action, all hope was lost, remarking that men like himself "did not use to go from such a place without either conquering or being conquered".

MUSAB I ZOBEIR^a. (Inedited.)

Arabic مصعب بن زبير

No. 36. Silver. British Museum. Unique.

Obv. Left. As usual.

Right. { مصعب
ي زوبيران
ذکر دل

Marg. بسم الله ؟ رو

Rev. Left. هفتاد = 70 odd.

Right. کرمانسر Kermansair ?

¹ Ockley, pp. 468-9; Abūl Faraj, Hist. Dyn., 127; Tabarī, MS.

^a Makrizi. "Nec minus frater ejus *Massab f. Zobair* in Iraka drachmas, quarum decem VII methkalibus respondebant, percussit, quibus homines donavit, donec *Al-Hadsjadsj f. Jusuf*, quem Abdolmalec f. Merwan princeps fidelium Irakam jam miserat, ab instituto improbi aut hypocritæ recedere licitum judicans illud mutaret."—pp. 82, 83.

"Primus autem, qui numos cudendos curaverit, fuisse dicitur *Massab f. Zobair*, qui fratris sui Abdallah f. Zobair jussu, anno LXX Chr. 639. in uno latere: *benedictio*, et in altero: *per Deum* eis inscripserit. Mutavit hoc *Al-Hadsjadsj f. Jusuf* anno post, et numis inscripsit: in nomine Dei, *Al-Hadsjadsj*."—p. 147.

IX. OMIAH BIN ABDALLAH.

Of the life and actions of Omiah bin Abdallah bin Khalid, Oriental historians have preserved but scanty memorials; these may almost be said to be comprised in the incidental notices of his appointment to and supercession in, the government of Khorásán.

The dates even of these events are by no means definitively fixed, but are stated by Tabarī to have occurred in A.H. 75¹ and 77

¹ و در سال هفتاد و پنج عبدالمالك و كيلرا اثر خراسان باز کرد
واميه بن خالد را بفرستاد

Tabarī, Royal Asiatic Society, MSS. 33, 34, and 99.

respectively¹. In the former year, Omíah replaced Wokiel (Walid²), the traitorous lieutenant of Abdallah Házim; and in the latter he was removed, in order that the province he ruled might be added to the already extensive power held by the celebrated Hejáj ben Yusaf, who shortly afterwards delegated this charge to Mohallab bin Abi Safrah.

AUMEAH I ABDALLAH. (Inedited.)

Arabic **أُمِيَّةُ بْنُ عَبْدِ اللَّهِ**

No. 37. Silver. Weight, 64·0 gr.

Obv. Left. **أَفْزَرُوتْ** **نِمْكَوْم**

Right. { **أُمِيَّةُ** **سَهْمُود**
يَ أَبْدُولَانْ **دَوْدَمُود**

Marg. **بِسْمِ اللَّهِ**

Rev. Left. **سَهْفَتَاتْ** **دَوْدَمُود** A.H. 73.

Right. **دَوْدَمُود** **سِيْزَاجْتَانْ** or **دَوْدَمُود**
سِيْهَاجْتَانْ Sejestán.

No. 38. Silver. Weight, 66·0 gr. General Fox.

A similar coin, with the place of mintage less fully expressed

سِيْهَسْتَنْ **دَوْدَمُود** or **سِيْزَسْتَنْ** **دَوْدَمُود**. Con-
tremarque **سَهْفَتَاتْ**

¹ چون سال هفتاد و هفت (هشت 33) (شش 34) اندر
آمد عبدالمك اميد بن عبد الله بن خالد بن اسدرا اثر

خراسان معزول کرد Tabarí, Royal Asiatic Society, MS. 99.



Price places the accession and dismissal of Omíah in 74 (75? in noticing the death of Wokeil) and 78 respectively; the former date agrees better with the date on our coins. See Vol. I., pp. 451, 454.


² وليد Walid? MS. Tabarí, No. 33.

³ This rendering the final mark **ن** as an N may be objected to, but the same form being used as an undoubted N in all other positions where its value is required, as contradistinguished from the similarly formed U, I have taken it as such to complete the word.


No. 39. Silver. Weight, 57·5 gr. British Museum.

Obv. Left. As last coin.

Right. {  اومیا
 ی اپدولان

Marg.  Contremarque. As on No. 9.

Rev. Left.  A.H. 74. چهرافتات

Right.  Khorásán. خراسان

No. 40. Silver. General Fox.

Obv. As in the last coin.

Rev. Left. ?  74 A.H. چهر [هفتات]

Right.  Mervairúd. مervairúd

X. KHALED BIN ABDALLAH.

M. Soret, of Geneva,—an author favourably known to European Numismatists,—has already published a description of a coin, nearly similar to that produced below from the Masson Collection, which he identifies as a piece of Khaled the son of Abdallah, who was nominated Governor of Busrah by Abdalmalik, in A. H. 71. The decipherment upon which this attribution is based was communicated to M. Olshausen previous to its submission to the public, and as it has received from that eminent Pehlvi scholar the stamp of his approval, it requires no adventitious elucidation in this place. M. Soret finds a difficulty in reconciling the historical evidence of the early Arab authors with the date on his coin, inasmuch as the Geneva Dirhem is dated A. H. 75, and Khaled is asserted to have lost his appointment in the same year that he received it; this manifest objection M. Soret proposes to meet by supposing a possible re-inauguration. I am, however, disposed to take a much more obvious and summary method of reconciling the discrepancy, by admitting excessive latitude in certain cases in the continuance of the use of an adopted die,—irrespective of the name it bore,—by the subordinate Government Agents, extending over a period long subsequent to the dismissal or decease of the last Mint-reforming executive authority.

KHALED-I-AFDULAN.

Arabice خالد بن عبد الله

No. 41. Silver. Weight, 59.0 gr. Very rare. British Museum.

Obv. Left. As usual.

Right. { خاليتي همدان
اپدولان همدان

Marg. بسم الله * محمد رسول الله

Rev. Left. چهره هفتاد و همدان همدان A.H. 74.
بيضا pro ران

M. Soret's coin is dated *Busrah*, A. H. 75.

It is worthy of remark that, if the reading now adopted from M. Soret is proved to stand the test likely to be supplied by the discovery of a greater number of specimens of this coinage, we are furnished with a new evidence of the entire want of a **خ** in the older Pehlvi alphabets; we have seen **همدان** &c., generally using the **هو** where modern practice employs the **خ**, but this is the first numismatic instance of the independent development of **ه** = H (now **ه**) as serving for the Arabic **خ**, without the succeeding **و** = **و**, which was once supposed to form a necessary element of the Pehlvi **ه** = **خ**. There is a difficulty as to whence the **ه** = **خ** was derived¹, (a group which likewise represents the **خ** in Zend), but I may notice, as possibly furnishing evidence towards any determination of the point, that it is singular that the Parsis of Bombay, while giving this last form as one of the signs of **خ**, should also make use of a precisely similar figure for the **ان**. (See Pehlvi Alphabets, lithographed at Bombay.)

I may note incidentally that the name now rendered Khaled in Neshki would be equally convertible from the original Pehlvi as **حاربت**, Hareth.

¹ Müller, 302.

XI. MOHALLIB BIN ABI SAFRAH.

The name of Mohallib i Abi Safrah finds frequent mention in the chronicles of the events of his day; and among the various descriptions of the intestine struggles, which continued in rapid succession to distract the empire of Islám, he is uniformly noticed as an able and energetic commander, till in process of time he attained the proud pre-eminence of the almost *official* designation of the greatest living captain' of the nation of all others, at that moment, the most distinguished for its military enterprise and success. To the details of his rise and progress we need at present but thus slightly refer, as it is not until he comes to be employed in an administrative capacity that our means of illustrating his career become available, when he is found holding certain districts in Persia-Proper for the maintenance of his troops while employed against the Azarakites². Of Mohallib's subsequent elevation to the government of Khorásán we have no numismatic record, the absence of such being probably attributable to the reformation of the Mohammedan currency which was effected in A.H. 76, and resulted in the discontinuance of the practice of commemorating names of either khalifs or viceroys on the coinage of the period.

Mohallib died in full possession of the chieftainship of Khorásán in A.H. 82³.

¹ I quote the Khalif Abdalmalik's own expressions, as rendered by Ockley (p. 473):—"Mohalleb" * * "who is a man of a most penetrating judgment and good government, hardened in war, and is the son of the grandson of it."

² When Hejáj is made governor of Kufah (A.H. 75), he receives orders from Abdalmalik to the following effect:—

باید که خوارج کومها^۱ فارس بمهلب دست بانر داری
که سبأ را روزی میدهد و شهر بسا و دارا کرد و اصطخر بدو رها
کني حجاج جنان کرد مهلب انر قبل خودش کارداران فرستاد
بدین شهرها

MS. Tabarí, Nos. 99, 33, Royal Asiatic Society.

³ Price (quoting Tabarí), I. 460.

MOHALLIB I ABI SAFRAH. (Inedited.)

Arabios مهلب بن ابو صفرة

No. 42. Silver. Weight, 56·5 gr. British Museum.

Obv. Left.	٧٤٣	افـنزوت
Right.	{ ٦٤٣ ٧٤٣ ٧٤٣ ٧٤٣	{ مهالبي ابوصوفرهان
Marg.	بسم الله	Contre-marque.

Rev. Left. ٧٤٣ ٧٤٣ ٧٤٣ پنج هفتات A.H. 75.

Right. ٧٤٣ بيضا

Other specimens of similar coins are to be found in the collection of N. Bland, Esq., and in the Bibliothèque Nationale, Paris.

No. 43. Weight, 53·7 gr. Sir H. Willock.

Obv. As in the last coin.

• Contremarque. ٧٤

Rev. Left. ٧٤٣ ٧٤٣ ٧٤٣ شش هفتات A.H. 76.

Right. ٧٤٣ بيضا

No. 44. Weight, 56·0 gr. British Museum.

Obv. As in the last coin.

Contremarque. ٧٤

Rev. Left. As in the last coin. A.H. 76.

Right. ٧٤٣ دارابكر for ٧٤٣

XII. ABDALMALIK BIN MERWAN.

The biography of one so prominent in the annals of the Moslem world as the Khalif Abdalmalik scarcely requires an extended chronicle in this place, being written at large in the history of the creed with whose greatness his name is so closely identified, whether for the re-consolidation of the pre-existing Mohammedan empire under the firm sway of a single dominant hand, or for the actual extension of its boundaries both eastward and westward, and originating those expe-

ditions which in the reign of his successor carried the standards of Islám into Christian Europe—in the subjugation of Spain¹, on the one hand, and into idolatrous India, in the reduction of Sindh and Multán², on the other.

It may be sufficient for the illustration of the subject more peculiarly claiming our attention, to recapitulate the mere dates of Abdalmalik's acquisition of the different portions of the Asian dominions already subject to the Mohammedan Arabs previous to A.H. 65, at which period—in virtue of his position as *Walí Ak'd*, which had been secured to him by his father, Merwán, in defiance of all equity and accepted engagements³—he succeeded to the limited sovereignty of Syria and Palestine, whence, awaiting his opportunities, he eventually extended his influence over the dependencies of Kufah and Busrah (A.H. 71)⁴; Ahwáz, Fárs, and Kermán (A.H. 72)⁵; Khorásán and Arabia (A.H. 73)⁶. He died in A.H. 86, after a reign of 21 years, dating from his first inauguration at Damascus.

ABDALMALIK BIN MERWAN THE KHALIF. (Inedited.)

Arabic *عبد الملك بن مروان* •

No. 45. Silver. Weight, 59.0 gr. Masson. Unique⁹.

Obv.	{	<i>ابدولملىكى</i>	
		<i>مروانان</i>	
Marg.		<i>بسم الله</i>	
Rev. Left.	<i>۳۳۱۵</i>	<i>پنج هفتات</i>	A.H. 75.
Right.	<i>۶۱۱</i>	<i>مرو</i>	Merv.

¹ Gibbon, vol. VI.; M. de Sauley's *Résumé*, Jour. Asiatique, 1839 (*Mousa*, 91, 92 A.H.).

² Beladori, *Reinaud's* Fragments, pp. xx and 190.

³ Tabari MS.; Ockley, p. 436; Price, I. 427.

⁴ Ockley (quoting MS. Laud, 161 A), p. 470; Price, I. 445.

⁵ Ockley, 472, 474.

⁶ Ockley, 475, 479; Price, I. 450.

⁷ The Armenian orthography of the name is expressed in Roman letters Aptělmělēk. (See Jour. As., vol. XIII. (1849), p. 339.)

⁸ Makrizi. "Quum autem post cædem Abdallæ et Massab filiorum Zobair, universum imperium ad Abdolmalecum f. Merwan devolutum esset, isque in pecuniam, pondera, et mensuras diligenter inquisivisset, tunc anno Hegiræ LXXXVI Chr. 695. denarios et drachmas cudi fecit, pondus denarii XXII Keratia minus grano in Syriaco (pondere); pondus drachmæ vero XXV Keratia æqualia con-

XIII. HEJAJ BIN YUSAF.

The biography of the celebrated Hejáj bin Yusuf has found a place in too many popular and easily accessible works¹ to require the transcription of any extended summary of his life and actions in this place. It may be sufficient, therefore, to say that Hejáj's extraordinary rise commenced with his expedition against Abdallah Zobeir, in A.H. 72. The success which attended this unpopular undertaking soon marked him out for further employment, and in A.H. 75 he was promoted to the magnificent governments of Irák, Khorásán, and Seistán². These, and added honours, he may be said

stituens. (Keratum autem IV granis, et quilibet Danek 2½ keratis constiterunt.) Scripsit autem ad Hedsjadsjum Irakæ existentem, ut similes numos cuderet³. Itaque eos conflavit, et eorum exempla ad civitatem prophetæ sociis, quibus omnibus bene velit Deus, superstites erant, misit, qui eos non improbarunt, sed sive æquali epigraphe, sive figura præditi erant, promiscue habuerunt."—pp. 83, 84.

"*Abdalmalec f. Merwan* drachmas titulis præditas primus conflasse dicitur. Duo vero numerum genera, alterum titulo persico instructum, Baglicense s. Alsauda VIII Danecorum, alterum græce inscriptum, Tiberiense IV Danecorum dabantur, quo cruditi istius ætatis in consilium adhibiti ita in unam summam collegerunt, ut XII proveniret, eaque in duas æquales partes divisa, VI Danecorum drachmas procuderunt. Referente Abulziado, *Abdalmalecus* Hedsjadsjo in mandatis dedit, ut in Iraka drachmas cuderet, cui mandato anno LXXIV, aut ut tradit Almadâhi, anno sequenti LXXV morem gessit. Deinde earum percussuram in reliquistractibus anno LXXV imperavit. *Hesjadsj* autem eis inscripsisse fertur: *Deus unus; Deus æternus est.*"—pp. 147, 148.

Beladery (dec. 279 Hij.), who is noticed by Fræhn to have devoted a special chapter to Arab coinage, informs us that he had heard that, up to the time of Abdalmalik, "les monnaies d'or courantes étaient Grecques, et celles d'argent étaient la monnaie des Chosroès ou des Himiarites" (وكانت الدينانير ديد). Beladery also endeavours to determine the exact epoch of Abdalmalik's introduction of Kufic money, which is said to have been first effected towards the end of A.H. 75, and to have been extended to the different provinces in the following year. See Fræhn, Jour. As., IV. (1824), p. 345.)

¹ "Secundum Almakrizium libro de pond. (v. excerpt. p. 86.) *Hedsjadsj* jam anno LXXIV aut LXXV numos vulgavit. Fortassis in moneta adornanda per annos LXXIV et LXXV periclitati erant prius, quum anno LXXVI omnia in hac arte erant assecuti."

² Ockley's Hist. Sar., 474 et seq.; Price, Hist. Moham., I. 448 et seq.; D'Herbelot, in voce Hegiage; Abûl Fedâ (Reisko), I. 421, &c.; Abûl Faraj; Elmâcin, p. 77.

³ Ockley, 480.


to have retained, with the exception of a brief interval, to the day of his death in A.H. 95, having in effect, though nominally only a viceroy, swayed for twenty years, with all a master's hand, the destinies of a mighty empire; his memory, it is true, is assailed by citations of his cruelties, but his own living answer to the like objection made by his immediate subjects gives a very sufficiently justificatory reply for his own case, and that of many other Oriental potentates similarly circumstanced—"In the way you live, you will always be treated with severity!"

HEJAJ BIN YUSAF.

No. 46. Weight, 60·0 gr. British Museum.

Obv. Left. Pehlvi.  (افزرت)

Right. Kufic.  الحجاج بن يوسف

Marg.  بسم الله لا اله الا الله وحده محمد رسول الله

Rev. Left.  78 A.H. هشت هفتاد

Right.  خت or هوت

No. 47. Weight, 57·0 gr. British Museum.

Obv. Area as in the last coin.

Marg.  بسم الله

Rev. Left.  79 A.H. ناهفتاد

Right.  بیضا

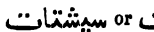

No. 48. Weight, 55·8 gr. British Museum.

Obv. Area and Margin as in the last coin.

Rev. Left.  81 A.H. یهستاد²

Right.  بیضا

¹ Tabari, quoted by Price, I. 477.

² This form is unusual, and perhaps open to question as at present rendered, but we find numerous instances of similar abbreviations of the unit word, and it would be clearly a greater interference with our materials to attempt to make the date into  or  in preference to 81, as above given.

No. 49. Weight, 59·7 gr. British Museum.

A similar coin in its entire details.

No. 50. Weight, 60·7 gr. British Museum.

A coin similar in its other features to the two last, but with the Kufic marginal legend $\text{الله} \text{الحمد}$.

A Pehlvi-Kufic coin of Hejāj, of a slightly varying type, is given by Fræhn, Jour. Asiat. IV. 336, with the marginal legend $\text{الله} \text{الحمد}$.

INDETERMINATE READINGS.

XIV. ZIAD.

No. 51. Silver. Weight, 45·0 gr. Masson. Pl. III. No. xiv.

OBV.	{	نيزات ي	
		الله الحان	
	Marg.	الله بسم	
REV. Left.		سبحه	A.H. 43.
Right.		د	Darábgerd.

I attribute this coin to Zíád, though I leave the conclusiveness of the identification entirely open to future correction. The name of Zíád—if such it be—is imperfectly expressed, and the final ن is represented by an ي and a following ا , thus, يا : but as this laxity of definition has frequently been found to occur in similar instances where the value of the combination is undoubtedly ن , it may be suffered to pass without further notice. The restoration of the patronymic is free matter for speculation, inasmuch as there are no less than three or four letters wanting in the middle of the name, and the now vacant space will not apparently admit of the arbitrary insertion of the letters wanting to complete the usual designation of Zíád's father. All available evidence considered, the date, place of mintage, and the legible portion of the chief name, seem to concur in fixing the attribution of the coin to Zíád; and looking to the facts attending the early denial and eventual acknowledgment of his title to call Abu Sofian his father, it is not impossible that the punch contremarque, which has fallen so invidiously on the most important portion of the second line, has, for the present, effaced the medallie recognition of the patronymic that Zíád was permitted to cite, prior to Moavia's concession of his claim of brotherhood.

No. 52. (Extracted from M. Soret. Given as "No. 758 du Catalogue Sprewitz.")

Obv. Head as usual.

Left.

نمک

Right.

{ نمک و سپردا read by him as معاویه
اللون-ادوسا ?

Marg.

بسم الله

Rev. Left.

سیچهل دودجا A.H. 43.

Right.

دود

Possibly "Mááwíá Amír úl rúéshúékán" or "úl húrāshuekán" (*Koraish*?).

XV. *Abdallah Amer.* عبدالله عامر

No. 53. Weight, 57 gr. Steuart, British Museum. Pl. III. fig. XV.

Obv. Head as usual.

{ اپدولا امیر نمک و سپردا
ولرویشویکان اللون-ادوسا

Marg. بسم الله

Rev. Left.

چهر پنجا دودجا A.H. 54.

Right.

دود — پ Dárābgerd.

XV. *Abdallah Zobeir*?

No. 54. Silver. Weight, 52.0 gr. General Fox. Pl. III. fig. XV/2.

Obv. Head as usual.

{ اپدولي امیر نمک و سپردا
ي ورویشویکان اللون-ادوسا

Marg. بسم الله

Rev. Left.

دودجا سی شست A.H. 63.

Right.

دود

ست ?

No. 55. Silver. Weight, 63.5 gr. General Fox. Pl. III. fig. XV/4.

Obv.

{ اپدولي امیر نمک و سپردا
ي ورویشویکان دودجا-ادوسا
ي ورویشویکان or

Contremarque. As on No. 9.

Rev. As last coin.

XVI. ABDALRAHMAN I ZEID. (*Possibly I ZIAD?*)

No. 55. Pl. III. fig. XVI.

Obv.	{	اپدرمان	ي نريتان
		دولاسر	دكوسر
Marg.		بسم الله	
Rev.	{	دوپنجا	52 A.H.
		ب	Busrah?

XVII. ABDULLAH ZOBEIR?

No. 56. Silver. Weight, 61.0 gr. Masson. Pl. III. fig. XVII.

Obv.	{	اپدولا	ي ونروبران possibly
		دكولاسر	بن نروبران
Marg.		بسم الله	Contremarque. As No. 9.
Rev.	{	دوششست	A.H. 62.
		دكولاسر	كرمان?

XVIII. ABDULLAH.

No. 57. Silver. Weight, 41.0 gr. Pl. III. fig. XVIII.

Obv.	{	اپدولا ي	
		دكولاسر	ار
Marg.		بسم الله	
Rev.	{	ششست	A.H. 66.
		دكولاسر	ي

XIX.

No. 58. Silver. Weight, 43.0 gr. Masson. Pl. III. fig. XIX.

Obv.	{	انرلم ي	
		دكولاسر	سوفهان
Rev.	{	هفت شست	A.H. 67.
		دكولاسر	د

XX.

No. 59. Silver. Weight, 64.0 gr. Masson. Pl. III. fig. XX.

Obv.	{	𐭠𐭣𐭥𐭥𐭥𐭥	𐭠𐭥𐭥𐭥𐭥𐭥𐭥
		𐭠𐭣𐭥𐭥𐭥𐭥𐭥	𐭠𐭥𐭥𐭥𐭥𐭥𐭥
Marg.		𐭠𐭥𐭥𐭥𐭥𐭥𐭥	
Rev.	{	𐭠𐭣𐭥𐭥𐭥𐭥𐭥	67?
		𐭠𐭣𐭥𐭥𐭥𐭥𐭥	𐭠𐭥𐭥𐭥𐭥𐭥𐭥

XXI.

No. 60. Silver. Weight, 53.0 gr. Masson. Pl. III. fig. XXI.

Obv.	{	𐭠𐭣𐭥𐭥𐭥𐭥𐭥	𐭠𐭥𐭥𐭥𐭥𐭥𐭥
		𐭠𐭣𐭥𐭥𐭥𐭥𐭥	𐭠𐭥𐭥𐭥𐭥𐭥𐭥
Marg.		𐭠𐭥𐭥𐭥𐭥𐭥𐭥	
Rev.	{	𐭠𐭣𐭥𐭥𐭥𐭥𐭥	𐭠𐭥𐭥𐭥𐭥𐭥𐭥 A.H. 72.
		𐭠𐭣𐭥𐭥𐭥𐭥𐭥	

XXII.

No. 61. Silver. Weight, 59.6 gr. British Museum. (Steuart.) Pl. III. fig. XXII.

Obv.	{	𐭠𐭣𐭥𐭥𐭥𐭥𐭥	𐭠𐭥𐭥𐭥𐭥𐭥𐭥
		𐭠𐭣𐭥𐭥𐭥𐭥𐭥	𐭠𐭥𐭥𐭥𐭥𐭥𐭥
Marg.		𐭠𐭥𐭥𐭥𐭥𐭥𐭥	
Contremarque.		𐭠𐭥𐭥𐭥𐭥𐭥𐭥	
Rev. Left.		𐭠𐭣𐭥𐭥𐭥𐭥𐭥	𐭠𐭥𐭥𐭥𐭥𐭥𐭥 A.H. 72.
Right.		𐭠𐭣𐭥𐭥𐭥𐭥𐭥	𐭠𐭥𐭥𐭥𐭥𐭥𐭥 Kermánán.

No. 62. Silver. Weight, 50.5 gr. British Museum.

Obv. As above.

Marg. 𐭠𐭥𐭥𐭥𐭥𐭥𐭥

Rev. Left.	𐭠𐭣𐭥𐭥𐭥𐭥𐭥	𐭠𐭥𐭥𐭥𐭥𐭥𐭥 A.H. 75.
Right.	𐭠𐭣𐭥𐭥𐭥𐭥𐭥	𐭠𐭥𐭥𐭥𐭥𐭥𐭥 Kermán.

No. 63. Silver. British Museum. Pl. III. fig. XXII/2.

Obv. As before.

Marg. بسم الله [only.]

Rev. Left. A.H. 75.

Right. كرمanser ولسرودا

I am scarcely disposed to attempt any precise identification of these coins, having an impression that they are mere imperfect renderings of the name of Omiha-i-Abdallah (No. XI. Governor). I adhere in the first name strictly to the most obvious reading afforded by the contour of the letters, but in the second word I have rendered the first and second letters altogether arbitrarily to suit the run of a probable name.

XXIII.

No. 64. Silver. Weight, 67.0 gr. Masson. Pl. III. fig. XXIII.

Obv.	{	المغیرا	
		ی مسلمان	
Marg.		بسم الله	
Rev.	{	سیهفتات	A.H. 73.
		سهجش	
		ال = ون pro	

XXIV.

No. 65. Weight, 74.5 gr. Steuart, British Museum. (Broken.) Pl. III. fig. XXIV.

Obv.	{	اپدلملیک امیر	
		ی ورویشوبکان	
Marg.		بسم الله	
Rev.	{	هفتات	[سي? or سد]
		م	

XXV.

No. 66. Silver. Weight, 54·0 gr. General Fox. Pl. III. fig. XXV.

OBV. Right.	{	اپدلا	اپدلا
		ي اپدولان	
Marg.		بسم الله	
REV. Left.		سدهفتات	A.H. 73.
Right.		سدهفتات	?

XXVI.

No. 67. Silver. Mr. Bland. Uniquo. Pl. III. No. XXVI.

OBV.	{	نرويتواتوس	نرويتواتوس
		سدات	سدات
		اشت	اشت
Marg.		بسم الله	
REV. Left.		پنج هفتاد	A.H. 75.
Right.		پنج هفتاد	

Before taking leave of the medals of the Arab Governors, I must not omit to notice certain copper pieces apparently struck contemporaneously with the silver money described in the preceding pages, though, from the absence of any officer's name on their surfaces, consequent on the baser metal being allowed to go forth unadorned by the designation of the issuing authority, they are destitute of the true historic value attaching to the higher coinages.

No. 68. Copper. Mr. Bland.

OBV. Device, the usual head, but to the right of the field, in the place of the governor's name, is inserted the word **نوک**. To the left is seen a small monogram.

REV. Device, a single figure.

Left.	پنج شست	A.H. 65.
Right.	د	د

No. 69. Copper. British Museum.

Obv. As above, with the addition of the marginal inscription **بسم الله**

Rev. Device, a single figure.

Left. **هشت شست** A.H. 68.

Right. **د**

• • Marg. * **دلو** *

A second similar coin, British Museum, has the contremarque **هـ**
or **هـ**

It is a frequent and too often a just subject of reproach against those who publish decipherments of ancient monumental writings, that the engravings that illustrate their subjects do not accord with the readings proposed by the author himself. Oriental inscriptions are of necessity more than usually liable to objections of this nature. In the present instance I have to claim unconditional indulgence in this respect, inasmuch as my interpretations have been printed from notes taken from the medals themselves some time since. The engravings were only commenced upon after the major portion of the present paper was actually in type, and are now completed at a moment when it is absolutely impossible to compare them with the originals, much less to endeavour to make them coincide with the text, or even to use this last as a vehicle to point out their defects. This must be sufficient exoneration for me; and for the gentleman who has executed them I have only to say, that with the exception of a want of knowledge of Pehlvi,—in my own opinion, I could not have met with a more excellent artist.

TABLE OF MINT CITIES AND DATES

A. H.	بوسراہ Busrāh.	بےزا Beiza.	دارابگرد Darabگرد.	نہ ?	نہ ?	یزد Yezd.
43	...	...	{ Zîâd. ? No. XIV.			
45	...	...	Obeidullah.			
51	...	Zîâd				
52	No. XVI. ?					
53	...	Zîâd.				
54	...	Zîâd	{ Abdallah Amer, No. XV.			
55	Zîâd.					
56	...	...	...	...	...	{ Obeidullah, Selim.
57						
58	Obeidullah.	Obeidullah.				
59	Idem.					
60	Idem.					
61						
62						
63	...	...	...	...	{ Abdallah Amer, No. XV. }	...
64	Obeidullah.	...	...	...	...	...
65	...	...	...	...	...	...
66	...	...	Obeidullah	Selim ?	...	{ Abdal Aziz, and No. XVIII. }
67	...	...	...	...	...	...
68	Obeidullah.	Aumar-i-Obeidullah	...	Aumar-i-Obeidullah	...	...
69	...	Idem	...	Idem	Aumar-i-Obeidullah	...
70	...	Idem	...	Idem	Idem	...
71						
72	...	...	...	No. XXI. Amraû.		
73	...	...	...	No. XXIV. ?	...	...
74	...	Khâled	...	...	...	...
75	Khâled	Mohallib	...	No. XXVI.	...	...
76	...	Idem	Mohallib.			
77						
78	...	...	...	Hejaj bin Yusaf.		
79	...	Hejaj bin Yusaf.				
80						
81	...	Hejaj.				

ON COINS OF THE ARAB GOVERNORS.

وفاة Kermán.	دولة Seistán.	مصر Me. v.	مصر Mervairúd.	بلخ Herát.	نورستان Hasa: asp. ?	بلخ ?	A. N.
							43
							45
							51
							52
							53
							54
							55
							56
							57
							58
							59
							60
							61
							62
...	{ Abdallah Hazim } and Selim ...	Selim.			63
...	The same	Selim	...	Selim.	64
Anmar-i-Obeidullah	The same.				65
...	The same	...	Selim.		66
...	The same	Selim	{ Selim and No. XX. }	Abdallah...	{ Selim and Abdallah Hazim. }
...	Abdallah alone...	...	?	Abdallah...	Abdallah.
...	Abdallah	...	Abdallah.	
...	Abdallah.				
							70
							71
							72
...	Omiah-i-Abdallah.	Omiah-i-Abdallah, Khorásán.			73
...	Omiah-i-Abdallah.			74
No. XXII.	Abdalmalik.				75
							76
							77
							78
							79
							80
							81

ADDITIONAL CITIES.

رد or بد Obeidullah Zíád, A.H. 62. Aslem i Sofian? (No. XIX.)
A.H. 67.

ل Zíád, A.H. 53.

نودب Zíád, A.H. 54, and different from سہجش Moghaira,
A.H. 73? (No. XXIII).

Kermán haft (Kermánshah?) Abdallah Zobeir, A.H. 62? (No. XVII),
and A.H. 63. Kermaunsr (Kermánsir?) Abdallah Amer, A.H. 63.
Musáb, A.H. 71. Ateah i Abdallah? (No. XXII.) A.H. 72, 75.

ج (short for Busrah?). Abdallah or Abdalrahman i Zeid? A.H. 52.

سرف (Khubus). Abdallah Házim, A.H. 63. Scythic coins, 63, 68, 69 A.H.?

IDENTIFICATION OF THE MINT CITIES.

1. Busrah, Pehlvi, بصره. The well-known city of Busrah requires but slight illustrative notice; it may be sufficient to refer the curious reader to the account of its foundation, &c., extracted from Ibn Kotaibah, in Reiske's *Abulfeda*, vol. v., p. 42, and to Tabarí MS., فصل در ذكر خيمى بناء بصره بعهد عمر. See also Ouseley's *Oriental Geography*, p. 63; "Aboulféda Texte," 308; *Edrisi*, ii., 155, 156, 161.

2. Beiza, Pehlvi, بيضا, written بيش for بيضا. "Beiza is one of the largest towns in the Koureh of Istakhar: it is a pleasant and well-inhabited place: its walls are white: and it was the station of the Mussulman army at the time of the conquest of Istakhar." (*Ouseley's Oriental Geography*, p. 103)¹; see also *Abulfeda (Text, Paris)*, p. 328.

The name of this Mint occurs frequently on the coins of the later Sassanidæ, where the more distinct formation of the several letters suffices to fix the orthography adopted above.

3. د is the mint monogram for the celebrated city of Dárábgærd, famous as the first capital of Ardeshér Bábegán, the founder of the Sassanian Dynasty of Persia. Dárábgærd was the metropolis

¹ "Beiza has a citadel with fortifications."—Ouseley, 93.

of an important district in the south of Fárs. Its position may be ascertained by a reference to any modern map. Dárábgerd, under the same monogram, is frequently found on the later Sassanian money, and its Mint continued to be employed after the adoption of the Kufic *Mohammedan* currency (در بجر د A. H. 91, see Müller, *De Numis. Orient.*). Tabarí MS., Ouseley, 89 et seq., Aboulféda, 330.

4. **هوت**. I have not been able to determine the precise meaning of this abbreviation. I have ascertained from the earlier Khusruí examples of its use that the initial letter is properly an **ه**, in contradistinction to the possible **س** or **س**, but it is still a question whether the three letters should stand as **هوت** or **هنت** **خت** **هوت**.

5. **ست دم**. Unidentified.

6. **دزد** Yezd, the well-known town of the name. Istakhrí notices "the district of Yezd" as "the most considerable division of the Koureh of Istakhar. Part of this district was formerly [previous to A. H. 300] reckoned as belonging to the province of Kermán, but now is included in the territories of Fárs." (Ouseley, p. 86, Aboulféda, 330.)

Some doubt might be raised as to the conclusiveness of this reading of the Mint Monogram **دزد** = **دزد**, as it most frequently appears in the coins of the Arab Governors, as **سد** = **سد**: but the earlier coins give a more correct outline of the different letters, and show the second down stroke as the exact correspondent of one of the known forms of the Sassanian Pehlvi **س**. See De Sacy's Alphabet, pl. vii., *Mém. sur Ant. de la Perse*, under **س**; also Longperier, under the same letter, Introductory Plate.

7. **كرمان** Kirmán. The province of Kirmán forms too important a portion of the Persian Empire to require further identificatory details than its own name carries with it. Tabarí tells us that the capital of the province was in olden days denominated **حیرفت**. (See also Ouseley, *Orient. Geog.*, 142, &c.; Abulfeda Text, 336.)

8. **سیستان** or **سیستان** Seistán; does not occur as a mint name till the 73rd year of the Hijrah, and it then seems to have been

¹ **اود** - Near Kasvin?—Ouseley, 167.

employed more to signalize the elevation of a new Governor, than as the representative of any given city, or the continuation of the use of the name from any set of dies previously so marked. In the form and execution of the central devices of these coins, as well as in the shapes of the Pehlvi characters of their legends, there is perceptible a striking uniformity with the same characteristics on the medals bearing the name of Khubus, and having the singular marginal legends which have formed a subject of remark elsewhere.

9. مړو Merv. Merv Shahjehán. The then capital of Khorásán. See Ouseley's *Orient. Geog.*, 215, *et seq.*; Abulféda, p. 456.

10. Mervalrúd, or Merv-rúd (Merv on the River), also a highly important town in the days of the Sassanians. After the first capture of Khorásán by the Arabs, Ehnif bin Kais makes it his head-quarters for a time. (Tabarí.) Othmán divided Khorásán into three Governments, of which Mervalrúd constituted one; its dependencies are represented by Tabarí as extending to near Herát. (و مړوارود) Balkh and Nishapúr were made the capitals of the other two divisions. The district subject to Mervalrúd was assessed, according to Ibn Khordadbeh, at 420,400 Dirhems. *Asiatic Jour.*, *Sprenger*, vol. xxx.; Ouseley, 220; Abulféda, 456.

11. Herát, called in olden time هري Harí. On the coins written هره Hărăh, or هرا Hará, as in Tabarí. See Ouseley, 217, &c.

12. مزلرشت. I have some reserve in proposing a decisive identification for the city represented by this mint word, but the combination reads so naturally Hazarasp (هجرشت), that I almost prefer to leave it thus, instead of seeking for a place more important and more frequently mentioned by Arab authors; but as I have reason to question if the early Arabs obtained so complete a settlement at Hazarasp as the extensive issue of coin would imply, I am induced to inquire whether this mint monogram may not possibly refer to Balkh, which was an early Moslem seat of Government, and in classical nomenclature, once bore a designation not very unlike Hajarasht or Aferasht, *i. e.*, *Zariaspa*. Hyde, *Hist. Relig. vet. Persar.* p. 494; Wilson, *Ar. Ant.* 160; see Ouseley, 241; "Fraser's Khorásán," Appendix, p. 67; *Hist. des Sammanides de Fremery*, 275; Edrisí, *Jaubert*, II., pp. 189, 190; Abulféda, 478. (See subjoined Plate II., figs. 11, 12, 13, and 14.)

13. **بابا** Baba, is another word perfectly legible in itself, the relative meaning of which is by no means clear. From the position it holds on the coins of Selim and his deputy, Abdullah Házim, it must be assumed to indicate a city situated within the limits of the Government of Khorásán, and it may possibly prove to answer to Nishápúr, or some of the more important cities of the province whose mint produce is as yet unidentified.

14. **لو** Unrecognised.

15. **ال** Unrecognised. (No. 8 of Plate II.)

16. **شش دود** Shash? written also **شش دود**? doubtful. See Ouseley, 233, vi., &c.; Aboulféda, 494.

17. **کرمانشاه** Kermánsháh. I suppose this to be the Pehlvi method of expressing Kermánsháh. (For various modes of naming this place, see De Sacy, Aboulféda; also **قرمیسین** **و** **کرمانشاه** p. 412; Edrisi, **قرماشین** **قرماشین** or **قرماسین** ii., pp. 143, 163, 164.)

18. **کرمانسر** Kermansir. This may possibly be the mint of the district of Kermansir, the eastern portion of Kermán towards Hindustán (sometimes called Nermansir. Marco Polo, p. 85; Pottinger, 199); Bormashir; Ouseley, 145; but the final **دا** may perchance merely indicate the city of Kermán.

19. **بص** or **بج** possibly the original mode of indicating Busrah.

20. **خوبس سرود** Khubus, in the desert of Kermán. See Ouseley, p. 199; Aboulféda, **خبیص** p. 442; Marco Polo, "Kobinam," p. 107.

The fac-similes of the Mint Cities of the later Sassanian Monarchs, to be found in Pl. II., have been reserved for notice in this place; I have, however, been induced to curtail any remarks I might otherwise have desired to make from the increasing uncertainty I have necessarily experienced as I have advanced in all Pehlvi decipherments that are not supported by collateral or contextual checks. In the identification of the Mint cities to be found on the coins of the Arab



Governors, a safe index was generally afforded towards narrowing the optional geographical circle, in the boundaries of the provinces submitted to the charge of each officer, whose name was impressed upon the coin; so that the leading name, date, and mint of each piece furnished mutual tests for the determination of the true reading of the conjoint legends. Here, however, no such internal aid is available; the place represented by a given monogram has to be sought over the broad extent of the entire Persian Empire, and we have not alone to combat the ambiguity of the letters themselves, but we find, in most cases, merely the leading portion of each name, which name itself, at best, has to be sought back through the medium of a second language and alphabet, and when reached with apparent *literal* certainty, the city selected is frequently found to have borne a totally distinct designation in the days to which the modern name would have to be made applicable. Under such circumstances I need scarcely excuse myself for not venturing upon any detailed examination of these abbreviations. Some of the more obvious readings may claim a momentary illustration: No. 1, Pl. II., reads clearly *Ram*; it may represent Ram Hormuz, or any *other* of the many *Ram*'s "Rests" of olden time; No. 6 may either be Nisah or Fcsah; No. 7 offers the optional letters 𐭠𐭣𐭥 Saham, 𐭠𐭣𐭥𐭥 Aham, &c.; No. 10 is a variety of the monogram I propose to render *Yezd*; Nos. 11, 12, 13, and 14, are copies of different examples of the name of *Hazarasp*? (Coins 22, 28, &c.); the original of 15 is unique, but the coin whereon it occurs is so much worn that it would not do to rely upon the outline of the mint name it retains; No. 16 is an early example of the method of writing the name of the mint numbered 4 in the above classification of the Arab mint cities; No. 17 occurs on coin No. 27,—my doubts concerning its reading have already been stated; No. 18 is a variant of Kermanhaft, ? the seventeenth mint city noticed above.

Among other monogrammatic abbreviations of the names of the Sassanian mints, which I have not thought worthy of places in the accompanying lithograph, I may cite—*a* 𐭠𐭣𐭥𐭥, *b* 𐭠𐭣𐭥𐭥𐭥 or 𐭠𐭣𐭥𐭥𐭥𐭥, *c* 𐭠𐭣𐭥𐭥𐭥𐭥𐭥, *d* 𐭠𐭣𐭥𐭥𐭥𐭥𐭥𐭥, *e* 𐭠𐭣𐭥𐭥𐭥𐭥𐭥𐭥𐭥, *f* 𐭠𐭣𐭥𐭥𐭥𐭥𐭥𐭥𐭥𐭥, *g* 𐭠𐭣𐭥𐭥𐭥𐭥𐭥𐭥𐭥𐭥𐭥 &c.

ARABICO-SCYTHIC? COINS, STRUCK AT KHUBUS.


No. 70. Silver. Weight, 58.4 gr. British Museum.

Obv. The usual linear imitation Sassanian head, facing to the right.

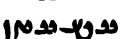

To the left of the head { Monogram 
and 

To the right, in front of the profile Legend, Pl. III., fig. 1.




Marg. In Pehlvi  In Kufic 

To the right of the profile 

Rev. Fire altar and supporters.

Pehlvi { Left  63 A.H.
Right  Khubus. Pl. III., fig. 2.



Marg. Upper compartments, see Pl. III., fig. 4.

I to  Left, Monogram, 
the George the  Pehlvi, 

Doubtful dates 68 A.H., Pl. III. and 69 A.H. The annual dates on these coins are generally incompletely expressed in their concluding letters.

See also engraving, fig. 4, Pl. xvii., Ar. Ant.














This may be a fitting place to notice the undetermined characters which so peculiarly distinguish these coins. A most important point in the examination of this subject is to determine even the direction followed by the writing, and although so necessary a first step can scarcely be said to be susceptible of direct proof, yet there are many internal coincidences serving to form a fair groundwork for legitimate conjecture. In the first place, it is requisite to test the question by the concurrent legends in other tongues: the reverse marginal inscriptions on the above coins will perhaps afford the most ready means of illustrating this inquiry.


If a straight line be drawn from the upper marginal star, through the centre of the device to the star below the foot of the Altar so as to divide the Reverse surface into two equal portions, and we examine the lower compartments of each, it will be found the word  to the right reads from the outside of the piece, whereas the monogram which occupies the left division—which is so frequently associated with  as to leave no doubt that it follows a like calligraphic inclination—is seen to be legible only from the inside; that is to say, the one has its head lines touching the series of dots which



encircle the field, while the other has its foot lines turned towards the area of the medal. Under these conditions, we should look for the initial point of the superior marginal inscriptions, supposing them in each case designed to follow directions similar to their succeeding words—as starting from the star and crescent directly above the apex of the flames of the Fire Altar, and taking the second letter to the left and the sixth letter to the right, which are identical, as our test, the head and foot lines in each legend would so far correspond; and in like manner, what may be styled the natural direction of the inscription occupying the space on the Obverse usually devoted to the record of the name of the issuer of the coin, would duly coincide with such a scheme of literal inclination, as would *all* similar writings on coins, Classes B, C, &c. It need scarcely be remarked that such a distribution of two legends starting in different directions from one and the same point, can only imply what there would be otherwise reason to anticipate, that the writing detailed ex perpendicular direction, or was arranged, as in the more obvious reading nations, in lines from the top to the bottom of the inscribed surface. The only difficulty in adopting such a determination is, that if we are to recognise in our strange alphabet certain very palpable-looking identities with existing Scythic characters, we must entirely reverse this order of reading, and take our marginal legends each upwards from the crescents and stars, falling in a line with the hands of the Fire Altar supporters, though equally the one must be looked at from the outside of the margin, the other from the centre of the device.

It may be useful to examine cursorily some of the more striking forms seemingly susceptible of isolation from amid the associate characters composing the various legends in this unidentified alphabet, which at the present moment are confined to the following signs:—

LETTERS.

No. 1  2  3  4  Variant?  5 
 Var.?  6  7  8  9  10  11 

The first in order and most frequent of occurrence is a form consisting of a simple thick circular line,—a round O. In the early stages of almost kaleidoscopic transition from the Greek Legends on the Gold Indo-Scythian coins, the triangular A's gradually merge from their appropriate form into a figure that might be compared to a reversed ρ , thus  whence the progression into the simple circle, which can be shown to have replaced the original A's, is easily traced; occasionally the circular portion of the ρ itself was detached from its

perpendicular line, and added to the number of already existing O's, so that in some of the debased gold coins, (Ar. Ant. xiv. fig. 16,) the entire legend presents little else than a simple succession of O's, varied at intervals by a few diverging cross-lines. In the later coins of Sassanian types the O's likewise prevail to an extent that renders it necessary to suppose that, taken as a *bond fide* literal sign, it must answer, like the Pehlvi , to many and various articulations. (I may remark, among other things, upon the identity of the form with the Nestorian O = ʾ, W, and the Sindhi , V.) Klaproth, *Aperçu*, Pl. vi., xi.

No. 2, considered as a compound of No. 1, and an affixed letter in the shape of a T, offers a very Scythic-looking combination; the latter bears a close resemblance to the current forms of Mongol and Manchu A, E, or N finals, &c.

Fig. 3 has also much the lower compartment equivalent; a very similar letter is to be found in the Georgian alphabet, as N. Klap. *Aperçu*, Pl. x.

Fig. 5 finds an exact counterpart in *Fa* Manchu (medial), Klap., p. 96. The assumed variant placed after the fac-simile above given, may possibly prove to be a different letter. The curious in these matters may trace the degradation of the K in Kanerki, Korano, &c., into an anomalous compound formed of three diverging curved lines, which are subsequently replaced by the letters now in question.







No. 8 is like a Pehlvi  P, as well as the same letter in the Manchu alphabet, and the B in Mongol. The letter immediately above the left shoulder of the figure on the obverse of the Khubus coins approximates very nearly to the form of Ph in the Manchu. (See Klap. *Aperçu*, 94, 95.)

Fig. 9 would answer to the E or medial A in Mongol and Manchu.

No. 10 is similar to the Georgian I. as a medial. The conjunctive line runs through the middle of the crescent, and I may notice as a peculiarity in the entire system of writing, that the letters seem, almost without exception, subject to junction by one continuous centre line.


No. 11 occurs only on contremarques, and it is moreover singular in furnishing a precise copy of the oldest form of the Pali  s.


No. 71. Silver. Weight, 55 gr. British Museum.

Obv. Head as usual. In front of the profile  which, sup-

 posing it to be Pehlvi, might be represented in Persian letters
 by  or  افتاف See Pl. III., fig. 22.



Marg. Pl. III., fig. 23.

Rzv. Fire altar as usual.

Left. 

Right.  ?

No. 72. A second specimen in the Masson collection has—

Obv. 


Rzv. Left.  ?

Right.  ?

NOTE REGARDING THE UNIDENTIFIED CHARACTERS COMPOSING THE LEGENDS ON CERTAIN CLASSES OF SASSANIAN COINS, Nos. 70, 71, 72.

The undeciphered characters to be found on the coins depicted as Nos. 4 and 8, Pl. xvii, and No. 22, Supplementary Plate, "Ariana Antiqua," and figs. 1, 4, &c., annexed Plate III., though they have attracted some attention from their singularity, have been hitherto passed over without that degree of examination or critical analysis, which their rare occurrence and palæographic interest seem to demand, and though we are still in no condition to decide their import in themselves, or the precise class among the alphabetical systems of Eastern Nations to which they properly belong, yet a close comparison of the various geographical and linguistic data furnished by the different series of medals united by the common bond of the impress of similar symbols on their surfaces, cannot fail to prove useful in preparing the way for a satisfactory determination of the origin and appropriation of the literal symbols in question, or

the development of what at the present moment continues to be the wanting hint towards a definite solution. Under any circumstances, this strange alphabet tested by its association with those of other tongues, whose conterminous existence is accurately defined, and weighed in its connexion with any national or dynastic indications that may chance to offer, will enable us to narrow the true geographical circle of its use around some fairly probable centre, and thus approximately indicate its local habitation, which at least will furnish a most valuable accessory towards the eventual elucidation of the more difficult problem, the family and structure of the language itself.

Without tracing the previous progress in the study of this particular inquiry, or undertaking the useless task of remarking upon coincidences that have escaped the notice of others, it may be sufficient introduction to a detailed examination of the subject, to cite, in as much of chronological order as the materials admit of, the various numismatic ramifications into which the use of this novel character is found to extend; these may be classified as follows:—

1. Its replacing the barbarous Greek on certain later Indo-Scythic coins.

2. Its independent currency on an extensive suite of unappropriated copper pieces of Indo Persian type.

3. Its detached use on certain coins of the imperial Sassanian type. (Nos. 9 and 10, Pl. xvi, *Ariana Antiqua*.)

4. Its association with the Sânskrit and Pehlvi on the Indo-Sassanian money. (Nos. 8, Pl. xvii, and 22 *Supp. Plate, Ar. Ant.*)

5. Its appearance on the Arabico-Pehlvi coins struck at Khubus. (Pl. xvii, fig. 4, *Ar. Ant.*)

6. And lastly, the illustrative information derivable from its continued use in *Contremarques*, after its seeming disappearance as an original mint alphabet.

I. The first of these divisions of the general inquiry is perhaps the most curious of the whole, though its aggregate details contribute little beyond the fact of the necessary antiquity of the use of the alphabet under review, in its replacing the original Greek on certain debased coins of the Indo-Scythic type; the comparative degree of antiquity, however, that may be assigned to its employment under these conditions, is still a debatable point, as the sole guide to its decision is the lapse of time which should be allowed for an originally foreign, and probably but imperfectly-acquired language, such as the Greek, as appropriated by these Scythic tribes, to become completely obscure in the hands of an adopting race.

A glance at Coins Nos. 18, 14, 13 and 12, Pl. xiv, Ar. Ant. will show the progressive corruption of the Greek alphabet on some of the less-perfect specimens of the Indo-Scythian mintages: up to this point, in spite of the very palpable debasement of the majority of the letters, there is enough of the primary elements of the legend retained, to justify an inference that even the marginal inscription on No. 12 was designed as an imitation of some of the many already imperfect copies of the original PAO NANO PAO OOHPIKI KOPANO of the earlier Kanerkí medals, Nos. 1, &c. &c., Pl. xiv, Ar. Ant.¹

Fig. 17, Pl. xiv, Ar. Ant. is the representation of a different species of coin distinguished by the peculiarity of being concavo-convex, or saucer-shaped; it will be seen however to have been impressed with many of the characteristics of the device of the imperfect coins just noticed, and to have received at the same time much of the crude outline of the Greek legend of their joint prototype, some letters remaining fairly legible, and the general intention of imitation of some one of the already indicated originals, being clearly perceptible throughout the entire obverse marginal inscription. The next coin of this class in the descending order of Hellenic legibility is to be seen in the Prinsep collection, British Museum, which has already been made public in the late owner's own engraving. (No. 6, Pl. xxxviii, J. A. S. B. IV.) Hence we may pass to the medal depicted as No. 16, Pl. xiv, Ar. Ant.²

If these several coins stood alone, in their simple conjunction with their obvious exemplars, the inference regarding their legends, in their present form, would merely be that the power or the will to fashion Greek letters had passed away with whatever of the knowledge of that language or alphabet had, concurrently with the Macedonian supremacy, reached the remote provinces of Central Asia, subsequently subjected to Scythic sway. But in associating an examination

¹ Professor Wilson proposed to divide these varieties of imitative pieces into two distinct classes, on the strength of a supposed change from the proper initial *K* in Kanerkí to a letter having somewhat of the similitude of a *B*, and so to read the one name as sanctioned of old, and the other as a new designation; it is doubtful whether the difference to be detected between the one and the other does not arise from a simple advance in the process of barbarization.

² Under a regulated system of collection and an attendant record of places of discovery much might be gained from such hints as the latter would afford in proving the starting point of coins of undeterminate origin, though of course as applied to gold coins in the East, any such information would carry with it less value than would be conceded in the case of similar data applied to the more locally fixed currencies of silver and copper. The gold saucer coins were found, 1, Kúndúz; 1, Badakhshán. See *Ariana Antiqua*, 378.

of the forms eventually produced by successive imitations from an original Greek model, with certain letters on more recent coins of a *locale* which cannot be very distantly removed from the probable "nidus" of these imitative pieces, the eye is necessarily struck by the absolute coincidence of many of the would-be Greek letters on the earlier medals with some of the alphabetical symbols of the very language of which it is now sought to discover the generic source. A reference to Fig. 4, Pl. xvii, Ar. Ant., which, as the latest in point of date and most clearly outlined, may be accepted as a specimen giving the most accurate idea of the once actually current shapes of the debatable letters, will satisfy the reader of the identity of several of the characters found on its margin with certain figures which constitute portions of the degraded Greek inscription on the gold Scythic medals just noticed¹. This identity being conceded, the question immediately arises, how did these alphabetical coincidences originate? the notion cannot for a moment be entertained, that any given degree of mere debased imitation of Greek, or any other so far lost language, could have suddenly arrested its downward course, and retained such fixity of form, as to carry itself comparatively unchanged through so many collateral modifications of monetary types and apparent varieties of sites, unaffected also by the contact with the veritable letters of two palpably current tongues, as this is seen to have done in the series intervening between the two extreme points now placed in juxtaposition.* Hence, did there exist no other ground for such a decision, this argument alone would suffice to prove that the singular literal forms under review must represent a portion of a *bonâ fide* alphabetical series, as distinguished from any servile copying of one standard legend,* or any indeterminate agglomeration of individual forms, selected at hazard from an imperfectly understood original, with a view to simulate a legible inscription.

A dependent inquiry next suggests itself—are these, to us unintelligible letters, which thus first appear upon manifest imitations of Scythian coins, by any possibility examples of a system of writing peculiar to the Scythians, and by them brought down and currently introduced into their new possessions? The first hasty reply would probably be in the negative², notwithstanding that many of the

¹ I instance especially *ofo*.

² A subordinate argument tending to show the want of any current alphabet among the Kanerki (Yue Chi) Scythians, presents itself in the exclusive numismatic use of Greek letters to express their native names and titles. The Kadphises Scythians, who equally may be supposed to have had no proper system of letters, adopted, with the Greek characters of their Bactrian predecessors, the

doubtful forms on the coins are absolutely analogous with existing alphabetical characters of certain Scythic tribes, as it has been shown that the Scythian hordes generally had no *proper* alphabets prior to the tenth century, A.D.¹, and in the particular case of the main horde of the Yue Chi, they did not adopt any scheme of writing specially adapted to express their own dialect until 1119, A.D.²; but these facts would by no means demonstrate that the division of this tribe which overran Northern India and settled down as the dominant race, in daily contact with a highly cultivated people, did not thus early adopt a set of symbols suited to express the articulations of their own tongue; neither is there anything inconsistent in the supposition that some of the letters thus appropriated should have found their way into the modern alphabets of the Scythian dialects; on the contrary, there are many points of internal evidence which tend materially to strengthen such a view of the subject³.

Without attempting at present to decide anything more definite, we must for the moment rest satisfied in assuming, from the mechanical indications afforded by the coins themselves, and the parallel instances of leaning towards local models capable of citation⁴, that the fabricators of the earlier of the two classes of coins under review understood, and had in common use the same alphabet that finds a place upon the later currencies, (Classes 2, 3, 4, 5.) and that in reproducing the forms of the characters of an unknown, and to them obsolete language, they fell from very ignorance into a progressively increasing assimilation of the distinguishing characteristics of its

Greek style and titles of monarchy, adding, as was the previous custom, corresponding Arian legends on the reverses of the coinage. These last are considered (Lassen, *Journal Asiatic Society, Bengal*), with some reason to have been adopted, and subsequently retained, in consideration of the possession of the chief seats of the currency of that language; so that their non-appearance on the Kanerki coins in no way affects the question of the antecedent existence of a Scythic alphabet. But the advantage taken by the Yue Chi of the Greek alphabet to define their own or local dignities and designations, proves against them a poverty of means of linguistic expression, which is not so obviously and distinctly chargeable against the Kadphises tribe, or the Parthian monarchs of Persia, whose motives for continuing titular Greek superscriptions in the full integrity of language and letters are easily appreciable.

¹ Ouigour alphabet, Klaproth, *Aperçu*, p. 90; Jaubert, *Journ. Asiatique*, p. 32, (1825,) *id.* p. 6, (1827), Khitan, A.D. 920, Manchu and Mongol, 13th cent. *id.*

² Klaproth, *Aperçu*, p. 27, &c.

³ See examination of coins of Khubus, p. 329.

⁴ See the run of Greek into Sanskrit in the Sah coins (*Journ. R. A. S.*, xi.), the lower Parthian Greek legends becoming Pehlvi, &c.

individual letters to the occasionally analogous linguistic symbols peculiar to the time and place wherein the imitative coinage received its impress.

All reference to that highly useful indicative portion of the subject, comprised in the typical coincidences of the saucer-shaped Scythian with other series of coins, has been reserved up to this time in order to leave the palæographic bearings of the question to be tried solely on their own independent evidence. It will be remarked, on adverting to Coin No. 17, Pl. xiv, Ar. Ant. which may be taken as the earliest of the convex coins at present within reach, that it possesses the peculiarity in the details of its device, that while the general habiliments of the principal figure remain but little changed from those worn by kings on the flat coins of nearly similar type, the head-dress has been subjected to a striking alteration in the accustomed erect unadorned conical top of the cap being made to project forwards, and terminate in the head and beak of a bird. In seeking for an instance of an analogous employment of such an unusual decoration, we are at once reminded that some of the Sassanian kings of Persia adopted, among other crest devices, the very identical ornament of a bird's-head, and tracing downwards the mutations in the coinage devices of these monarchs, we find that the first instance of the use of such a symbol occurs on a medal of Varahran II.¹, A.D. 279—296: where the head-dress of the young prince who faces the two principal figures on the obverse, is fashioned as an almost exact counterpart of the cap of the successor of the Scythian, on the gold coins under more immediate notice.

After a brief interval in Persian history, this decoration again appears on the Sassanian money, when it is found forming a portion of the coronal insignia² of Hormuzdas II., A.D. 303—310³. Whether this device, originating among the imperial Sassanidæ, found its way to independent eastern countries, and was there imitatively adopted, and whether at or about either of the periods just quoted as those of the reigns of the aforesaid Persian kings, it would perhaps be difficult to say; but the association is by no means improbable; and as consecutive evidence of the prevalence of such appropriations on the part of the Scythians, it may be noticed that the community of

¹ Longperier, Pl. iv, figs. 5, &c.

² *Idem*, Pl. v, figs. 4, 5, p. 34.

³ The coincidence of this Hormuzdas' having espoused a daughter of the King of Kabul, is perhaps in some way to be connected with the introduction of so much of pure Persian devices among the Eastern nations.

head-dress is still more distinctly marked in the next step in the deterioration of the Scythic type, where the head of the standing figure is surmounted by the winged-crown, which so essentially belongs to a Sassanian model'.

SEC. II.—This branch of our subject contributes but little towards either the correct location, or the ascertainment of the precise nature of the alphabet under examination, as the information to be gained from its appearance on the surface of a series of unappropriated coins¹, bearing signs of an Indian, or Indo-Scythic, combined with a Fire-worship affinity, whose origin and place of currency, also, are up to this time undetermined, merely allows us to infer from the number and variety of the specimens extant, that the language represented by the symbols constituting their legends, was independently current over a not unextensive surface of country, which, to judge from the typical indications furnished by the coins themselves, should lie proximate to some of the geographical points of contact of India and Persia.

SECT. III.—The next link, in the numismatic history of these characters, claiming attention, is the similarity observable between the Persian proper coins of Sapor II. Zu'laktaf, the posthumous son and eventual successor of Hormuzdas II., and those depicted as Nos. 9 and 10, Pl. xvi, Ar. Ant. (p. 389.) These latter medals will be seen generally to follow the pure Sassanian types, and are the only examples in the entire Sassanian series which bear legends, expressed in the unidentified alphabet under consideration; their association² with the Pehlvi coins of Sapor II. is based upon the similitude of the fashion of the tiara which surmounts the head of the monarch on both classes of money, and may be accepted for the moment as sufficiently demonstrating either, in the representation of his portrait on the provincial coinage, the extension of his sway over certain more easterly countries; or, if the obverse device be designed for the bust of the local monarch, as showing in its imitation of the peculiar costume of the Persian Emperor an acknowledgment on the part of the adopter of the superiority, if not supremacy, of a Sassanian Suzerain. If the analogy between the characters in the inscriptions on Coins Nos. 9

¹ Fig. 16, Pl. xiv, *Ariana Antiqua*, &c. See also p. 379, *Ariana Antiqua*, and *Prinsep, Journ. A. S. Bengal*.

² For Engravings, see *Ariana Antiqua*, Pl. xvii, figs. 12, 13, 14, 15, 16. *Prinsep, Journ. A. S. Bengal*.

³ Wilson, *Ariana Antiqua*, p. 389, &c.

and 10, Pl. xvi, Ar. Aut., and those occurring on their Scythian predecessors (fig. 17, Pl. xiv, Ar. Ant., &c.), did not effectively indicate a degree of community between the two different issues, it would be conclusively supplied in the numismatic testimony conveyed in the singular fact of this branch of the Fire-Altar series invariably retaining to a marked extent, the concavo-convex form, which so especially distinguishes the imitation Kanerkí medals (Class I.) whereon the first definite specimen of the peculiar writing presents itself. Another coincidence of value in the correct classification of medals is to be detected in this ramification of Sassanian money, as evidenced by the unique instance, in the whole mint annals of that dynasty, of the application of a monogram: added to which, the outline of that monogram, when closely examined, is found to bear a striking resemblance to the general peculiarities of those in use among the Indo-Scythians¹, on whose medals a but little varying symbol is seen uniformly to occupy the exact place on the obverse field of the piece which the more modern representative still holds on the later issue of Sassanian origin.

In this stage of advancement towards unquestioned Sassanian devices, amounting indeed to a complete adoption of the fixed types in their full integrity, modified only by the use of the local language in lieu of the accustomed Pehlvi, it seems requisite to conclude that whereas previous examples of a partial appropriation of certain points of detail in costume may simply import imitation by an independent race of the models introduced by the most powerful of Asian monarchs, the present comprehensive assimilation of type with the Persian originals must be held to indicate some more direct interference with, or even a specific annexation of certain provinces, wherein the doubtful language whose symbols mark our coins was current. How much of the religion of Zoroaster accompanied the extension of the circle of the numismatic dominance of the emblems of that creed, is a question which need not detain us at present.

SECT. IV.—The appearance of these indeterminate characters in numismatic conjunction with the known Devanágari and Pehlvi alphabets, offers in itself a pertinent indication of the boundaries of their currency, as necessarily intermediate between the Indian seat of the one alphabet and the Persian appropriation of the other; added to this, is found the more definite evidence of proximity to the latter country, in the inscription of the name of Khorásán, on a class of

¹ See especially the monogram on No. 16, Pl. xiv, *Ariana Antiqua*.

coins (B)¹ identified with the peculiar language in question by the adjunct of its characters on the field of the obverse. Less direct but still valuable evidence towards the determination of the exact *locale* of the use of one set of literal symbols, in the more close definition of the true line of the conterminous currency of their two associates, is contributed by the detection of the name of Zabulistán, as impressed upon the bilingual Sanskrit-Pehlvi coins of Vasu Deva².

SECT. V.—The present division of the circle of our inquiry demands but brief remark. The information conveyed by the associate Pehlvi legends on the coins, being concise and distinct to the point, amounting to the affirmation (if the interpretation fail not) of the most precise and definite nature yet obtained from any other class of previously noticed medals, to the effect that the Arabico-Khusruí coins³, inscribed with the singular characters more especially under investigation, were struck at Khubus⁴, in the Kermán desert, in the year 63, *et seq.* of a cycle, which the adjunct of the Kufic Bismillah **بسم الله** on the margin of the pieces indicates as necessarily Mohammedan, and consequently Anno Hejiræ.

In this combination of data, we obtain the determination of the fact, that in A.H. 63 the language, whose characters now occupy our attention, continued in free and apparently dominant use at this point, intermediate between Persia proper and Northern India.

SECT. VI.—The evidence furnished by the continued use of these characters in “contremarques,” or the small punch impressions employed by a subsequent, or a foreign power, to legalise the currency or attest the intrinsic value of a strange coinage, subsequently to the Mohammedan conquest, and indeed, upon Mohammedan coins themselves, indicates clearly the *bonâ fide* existence of the language they were used to express, as well as its survival of the epoch of the first introduction of Kufic, in addition to the other alphabetical associations it has been seen to have undergone. Moreover, taking these contremarques as couched in the real or adopted language of the

¹ Class B; *vide infra*.

² Class A, described below, p. 342.

³ Ariana Antiqua, Pl. xvii, Fig. 4, p. 402; Olshausen, Die Polhwie Legenden.

⁴ **خَبِيس**. See Ouseley, Orient. Geog., p. 199.

⁵ Ex. gr., see Coins Nos. 9 and 38.

dominant power, the state in which the Arabico-Khusruî coins were thus made legal tenders must, in this view of the case, have been still subject to a race, who owned as their *court* language, the tongue usually rendered by the unidentified symbols under review.

MISCELLANEOUS INDO-SASSANIAN COINS.

No. 73. Barbarous coin, debased metal, concavo-convex.

Obv. Rude bust, with close head-dress, facing to the right; behind the head, in old Sanskrit,  = षहि Shah

Rev. Imperfect representation of an altar, only partially impressed.

No. 74.

Obv. As No. 73, with the addition of flowing fillets behind the head. The

front of the profile in old Sanskrit 
म ——— variant?

Rev. As No. 73.

Nos. 75 and 76. Coins figured as Nos. 11, Pl. xvii. and 20, Pl. xxi., Ar. Ant.

Obv. Head to the right. In front of the profile

, श्री षहि  Sri Shahî.

It is useful to note the modification of the Devanagari letter ष in these coins as introductory to the more decided change in the letter to be seen below.

Rev. The usual fire altar.

No. 77. Copper. Fig. 6, Pl. xvii., Ar. Ant.


Obv. Head facing to the right, &c. Legend in unidentified characters, Pl. III., Fig. 21.

Rev. Fire altar and supporters; between the figures of the worshippers, forming a part of the altar itself, are the following letters:—

श्री टटे ?	|	Srî Tate(ch)¹.
षहि श्री	|	Shahî Srî.

¹ See also Obverse margin of Class B—Tchoch ? Takash ?

No. 78. Figured in *Ar. Ant.* as 7 of Pl. xvii., and *Jour. As. Soc. Bengal*, Vol. VI. Pl. xiv. fig. 3.

M. De Longperier has attributed a very similar coin to Hormuzdas III., the son of Yezdegird, interpreting the Pehlvi  *Auhrimaad*? See *his* p. 59, fig. 1, Pl. ix. The reading is scarcely satisfactory, and the type differing materially from those of the coins placed before and after it, renders the assignment more than questionable. Let the Pehlvi name be what it may, the Chakras on the reverse, and the Nagari letters scattered about the fields, give the class of coins a decidedly Indian complexion. Among the rest may be found the old Sanskrit forms of ह : ट or द and त or च.

As connected with the subject, this may be a fit place to notice a rare copper coin in the British Museum, which in a measure seems to bear affinity to the class of medals just referred to. The Obverse presents what to Indian numismatists we should designate as an almost Gupta head, around which is inscribed, in a very old style of Devanagari, the legend श्री राज यगुतरित्य श्री Raja Yagutaritya?

The Reverse of this coin displays a fire-altar and supporters, and below the altar is an affair shaped precisely as an inverted pair of spectacles.

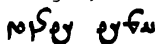
CLASS A.

INDO-SASSANIAN.—VASU DEVA.

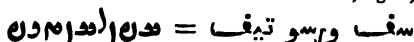
No. 79. Silver¹.

Obv. Centre.—Bust and bearded front face, head surmounted by a winged crown, partially modified from the Sassanian original, above the apex of which is seen a crescent and a star; the hair is arranged in two globes of curls depending from the back of the ears, after the manner of certain Sassanian coiffures, and behind the neck appear the ends of the filets².

To the right of the figure, in Pehlvi characters



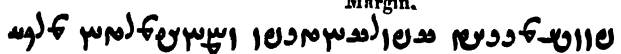
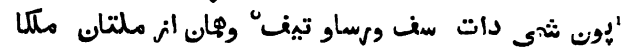
To the left of the main device in Pehlvi characters, fig. 9, Pl. III.



¹ For engravings, see *Jour. As. Soc. Bengal*, Vol. III. Pl. xxv. fig. 6; *Ar. Ant.*, Pl. xxvii. fig. 9.

² Traceable in the Sassanian models afforded in Longperier's plates of the coins of Sapor II., Artaxerxes II., and Sapor III., &c.

Margin.

 { In modern Pehlvi.
 { In modern Persian.


See Pl. III., figs. 10, 11, 12 and 13.

Rev. Centre.—Bust, with front face: head-dress, close cap, with ascending flames coming to a point over the middle of the head; hair pendant in two large knots of curls, similar to the arrangement seen in the Indo-Sassanian coins (Reverse) B.

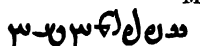
To the right of the bust

श्री वासु देव : Śrī Vāsu Deva. Pl. III. fig. 16.

To the left of the bust

 پندچای نراولستان Pl. III. fig. 14.

Margin.

 سغری جرمانشان ? Pl. III. fig. 15.

A medal, in the Vienna Cabinet, very similar in its typical composition, has been figured in M. De Longperier's work on Sassanian coins, Pl. xi. 3, and attributed to Khusrú II. (Parviz): likewise engraved in Ouseley's Memoir, No. 8. As I do not rely upon M. D. L.'s Pehlvi decipherments, or the accuracy of his engraver, and as in this case he only ventures to read a small portion of the entire legends, I abstain from any remarks based upon such unsatisfactory materials.

¹ In nomine Justī judicis. Anquetil, *Zend-Avesta*, ii., 341.

CLASS B.

INDO-SASSANIAN¹.

No. 80.

Obv. The half profile of a man's head, unbearded, but with small mustaches, pendant ear-rings, close cut hair, with filets appearing at the back; skull-cap², ornamented with trident-shaped objects in front and on the sides, with the crest of a tiger's head.

Unidentified characters, Pl. III., fig. 17.

¹ For engravings of similar coins see Jour. As. Soc. Bengal, Vol. III. Pl. xxi. figs. 10, 11; Journal Asiatique, Vol. VII. (1839), Pl. xvii. fig. 34; Ar. Aut., Pl. xxi. fig. 22.

² Artaxerxes II. (A.D. 380, 384), Longperier, Pl. vii. figs. 1, 2, 3, is the first Sassanian who introduces caps of this close form, with ornaments as it were attached, less than as forming a portion of the crown itself. The present caps remind one of many of the old-fashioned sowars' helmets still in use in India, wherein the front ornament (often, too, a variation of a trident in shape) is moveable, and inserted at will.

Margin.

श्री हि ति विरखरलावदरदेविर श्री षहितिण तदेचनरित

Variants

विरचे

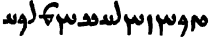
शीर

Sri Shahitina तदेवनारित

च Pl. III., fig. 20.



Rev. Bust to the front, close cap, with ascending flames on each side coming to a point some distance above the centre of the head-dress, fillets of the Sassanian style, and hair tied in bows below the ears. The face is unadorned by either beard or mustache; but still, in the majority of instances, looks anything but feminine. The connexion in style with the head-dress on the Reverse of Coin A. (Vásu Deva) is obvious and striking.

Left.  Pl. III., fig. 18.

Right.  Pl. III., fig. 19.


In regard to the Sanskrit readings of the Obverse marginal legends I have little or nothing to say in their favour. I can afford to fail where such men as Prinsep and Wilson have been so signally foiled. The truth is, the Sanskrit characters are so imperfectly formed, and vary so materially in different specimens, that this in itself creates a tendency to distrust any decipherment, however carefully collated.

In respect to the Reverse Pehlvi, too, much indulgence is to be claimed, and I do not wish for a moment to conceal that the portion now rendered as "*sif tumsuf tef*" has previously been read "*haft haftád*", 77, which last in reality is the most simple and obvious decipherment. I have been induced to reject it, probable and satisfactory as it seems to be, both because I have had to concede a different meaning to a very similar legend (see Left Obverse, Coins A²), and because the

¹ The  of Abulfaraj, (pp. 116, 183, Edit. Pocock, Oxon.) has been shown to convey the current title of the Tartar monarchs. (See St. Martin, Arménie, II., 18.) And I may as well take this opportunity of alluding to the word  of the Persian and Arabic authors, which has been held by late writers to be applicable as the name of an individual, and has hence furnished ample ground for conjectural identifications. (Guildemeister, De Rebus Ind. p. 5; Ariana Antiqua, 133; Reinaud, Mémoire sur l'Inde.) The following passage from Tabari determines that this also is a mere generic designation of Indian kings.

و ملك سندرا بزبان ايشان رپيل خوانند چنانكه ملك عجم را

كسرى خوانند و انرا ن روم را قيصير خوانند

MS. Tabari, Royal Asiatic Society, No. 99, cap. 

highness of the number renders it questionable as applied to the epoch of a reign; and for many reasons the date would not suit the Hejira cycle; added to which, of the large number of coins of this description I have lately had an opportunity of examining¹, no single one offers any modification of the fixed legend, such as would be expected did the legend in question supply the date.

I find a difficulty, too, in the name of **تکھون**; but only in the third letter, which is curiously shaped, and may possibly be a **و** = **و** ^d; **د** = **د** ^e, or a **خ** joined to the succeeding **و** = **و**.

¹ Amounting to 70 or 80 at the least. Masson alone has 40 or 50.

CLASS C.

VAKHU DEVA.

No. 81. Copper¹.

Obv. Area.—A coarsely-executed bust, facing to the right; beardless chin; head surmounted by a winged diadem, above which is seen the crest of a tiger's head, similar to that found on Coins B.

To the right **श्री वहार**
Sri Vahāra.

To the left **वखु देवः**

Vakhu Deva².



Pl. III., fig. 5.

Marg. Legend expressed in the unidentified characters engraved in Pl. III., fig. 8.


¹ Engraved as fig. 6, Pl. xiv., Jour. As. Soc. Bengal, Vol. VI. (1837); and No. 8, Pl. xvii., Ar. Ant.; also fig. 6, Pl. xxv., Jour. As. Soc. Bengal, (1834).

² Professor Wilson reads this **श्री बत्मान - वसु देव** *Sri Batmana-Vasu Deva*. The second word is given as doubtful; but the *Vasu Deva* is stated to be "unequivocal" (Ar. Ant., p. 400). The letter rendered *tm*, in modern Sanskrit characters, presents no doubt a difficulty, and if there are no means of confirming, there exist no sufficient data for rectifying the reading of so high an authority as the author of *Ariana Antiqua*; but many will perhaps still prefer the decipherment originally proposed by Prinsep of Sri Vihāra (J. A. S. B., VI. 293). As regards the *Vasu*, I have less hesitation in objecting to Professor Wilson's position, as the second letter in the name, if rightly intended for an **स** *s*, should in some measure correspond in outline with the undoubted **स** in the *Vasu* on Coins A. In the value now assigned it will be seen that I again follow the first of Sanskrit palæographers, the late illustrious Secretary of the Asiatic Society, Bengal.

Rev. Area.—Fire altar and supporters.


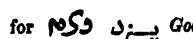

Left. In badly-formed Pehlvi letters  for 

Or in Persian characters  for . Pl. III., fig. 6.

Right. Also in imperfect Pehlvi  for

 =  for 

At times, the legend seems as if it had been intended for a modification of the usual invocation in the substitution of


















   *God*. Pl. III., fig. 7.









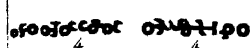



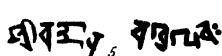







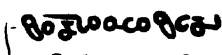















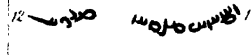



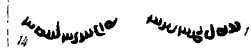















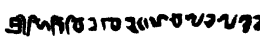











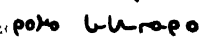
Marg. Precisely similar to that on the obverse.

COINS OF TABARISTAN.

I have already had occasion to remark upon the limited number of Tabaristán coins that have found their way into our English cabinets—as such I need scarcely repeat that the materials at command have been found insufficient to form a sound basis for any criticisms upon certain very debateable points still existing in regard both to the correct reading of the coin dates themselves, and to their application, when read, to the several cycles to which they may possibly refer. Such being the case, I confine the present notice to a register of such coins as I have had an opportunity of examining in original, and an expression of my own ideas of the correct interpretation of the dates to be found on each.

LEGENDS ON THE COINS OF ARAB GOVERNORS

Name	Date	City	Miscellaneous	Legends
I 	١٠٠٠ هـ	البحرين	a	١٠٠٠ هـ
II 	١١٢٠ هـ	البحرين		١١٢٠ هـ
id 	١١٢٠ هـ	البحرين		١١٢٠ هـ
III 	١١٢٠ هـ	البحرين		١١٢٠ هـ
IV 	١١٢٠ هـ	البحرين		١١٢٠ هـ
V 	١١٢٠ هـ	البحرين		١١٢٠ هـ
VI 	١١٢٠ هـ	البحرين		١١٢٠ هـ
VII 	١١٢٠ هـ	البحرين		١١٢٠ هـ
id 	١١٢٠ هـ	البحرين		١١٢٠ هـ
VIII 	١١٢٠ هـ	البحرين		١١٢٠ هـ
IX 	١١٢٠ هـ	البحرين		١١٢٠ هـ
id 	١١٢٠ هـ	البحرين		١١٢٠ هـ
X 	١١٢٠ هـ	البحرين		١١٢٠ هـ
XI 	١١٢٠ هـ	البحرين		١١٢٠ هـ
XII 	١١٢٠ هـ	البحرين		١١٢٠ هـ
XIII 	١١٢٠ هـ	البحرين		١١٢٠ هـ
XIV 	١١٢٠ هـ	البحرين		١١٢٠ هـ

Name	Date	City	Miscellaneous	Legends
XIV 				
XV 				
id 				
id 				
id 				
XVI 				
XVII 				
XVIII 				
XIX 				
XX 				
XXI 				
XXII 				
id 				
XXIII 				
XXIV 				
XXV 				
XXVI 				

No.	Reference to Possessor.	Name on the Coin.	On Margin.	DATE.	
1	B.M. S. 17 .	م ل د م	د م	چهارشست	64
2	E.I.C., Masson	Id.	Id.	نود و هشتات	89
3	Idem . . .	Id.	Id.	هفت و نود	97
4	Idem . . .	Id.	Id.	نود و نون	99
5	Idem . . .	Id.	Id.	دوست	102
AUMAR.					
6	{B.M. 1 . . . Stokes 1 . . .}	م ل د م	د م	ویست و نود	120
7	{B.M. 2 . . . Paris 1 . . .}	Id.	Id. ⁴	چهار و بیست	124
SAYID (Kufic).					
8	{E.I.C., Wil- lock . . .}	س عید	د م	پنج و بیست	125
9	{B.M. S. 17, Marsden xviii, Bland, Stokes, Paris, Ac.	Id.	Id. ⁵	شش و بیست	126
10	{B.M. S. 17, Stokes . . .}	Id.	Id. ⁵	هفت و بیست	127
OMAR (Kufic).					
11	{2, B.M. S. 17, Willock . . .}	ع م ر	د م	هفت و بیست	127
12	{Marsden xvii, B.M. 2, Paris 1 . . .}	Id.	Id. ⁵	هشت و بیست	128
13	{B.M., Stokes 2, B and . . .}	Id.	Id. ⁵	نویست و بیست	129
14	{B.M. 1, Bland 1}	Id.	Id. ⁵	ویست و دو	130
MUKATIL (Kufic).					
15	{B.M. 3, Wil- lock, Bland . . .}	م قاتل	د م	نارس و بیست	139
HANI.					
	{B.M., Bland 3, Stokes . . .}	ه نانی	د م	هفت و بیست	137
	B.M. 2 . . .	Id.	Id.	هشت و بیست	138

¹ خورشید.² عید . ?

³ Olshausen says 114 (see Num. Chron., p. 90). M. Soret gives a Khurshid (Lettre, p. 13), which he doubtfully reads 110 or 103; it may be 63.

⁴ د م margin.⁵ ۱۱۵۱ margin.⁶ Olshausen reads this 220.

ART. VII.—*On the Mountainous Country, the portion of Asher, between the Coasts of Tyre and Sidon, and the Jordan. By CAPTAIN NEWBOLD, F.R.S., For. Member of the Philomathique and Geological Societies of Paris, &c.*

[Read February 20, 1847.]

THE mountainous country lying between the coasts of Tyre and Sidon and the valley of the Jordan presents almost a complete blank, even in our latest maps of Palestine. Nau (A.D. 1674) went from the mouth of the Kasimiyeh river to Safed; Buckingham (A.D. 1816), from Banias to Sidon; Ven Monro (A.D. 1833) went from Safed to Tyre; and my friend Mr. Thomson, the American missionary of Beyrút, took a somewhat similar route in 1837. In 1835, Mr. Smith passed from the Húleh, through Merj Ayún, to Jezzin, and subsequently (1838), in company with Professor Robinson, from Safed to Tyre.

The last intelligent travellers, however, appear to have passed through this interesting country with less attention than they usually bestowed on other parts of Palestine. Professor Robinson explains the circumstance, and their regret, in the following terms¹:—"In proceeding from Safed to Tyre, and thence by Sidon to Beirút, we supposed that we were about to travel a beaten track, which had been repeatedly described, and could therefore present nothing of novelty, whatever there might be of interest, connected with the renowned emporiums of ancient Phœnicia. Under the influence of this impression, and feeling that our work was done, I am sorry to say we paid a less exact attention to our course, and to the various objects along the way, than had hitherto been our custom. I regret this the more, because it turns out that the country between Safed and Tyre was altogether unknown; and even the route along the coast between Tyre and Beirút, although often travelled, has never been accurately described."

My own routes, in 1845, lay from Tyre, by the Castle of Maron and the head of the Lake Húleh, to Banias, and back from Hasbeia and the Castle of Esh Shukíf to Sidon. My shore route extended from St. Jean d'Acre, by Tyre, to Sidon.

In adverting to Mr. Smith's valuable catalogue, in Arabic and

¹ Vol. III., pp. 365, 366.

English, of places in Palestine, I find that lists of the villages of the Bellád Besháreh and Esh Shukíf districts, as well as of those of the coasts of Tyre and Sidon, of Yafa and Haifa, are yet wanting to complete the survey of Palestine Proper. During my trip, I was fortunate enough to supply, in some measure, this deficiency as regards the two first of these districts and the coasts of Tyre and Sidon; though the lists are by no means complete. They were obtained from various Sheikhs, and checked by mutual comparison.

I shall now proceed to give a general outline of the country under description.

Modern Division and Boundaries.—It is divided into two large districts, the northernmost of which is called the Bellád esh Shukíf بلاد الشقيف, and the southernmost Bellád Besháreh بلاد بيشارة. Each of these districts is divided into its maritime and inland or mountainous tracts, distinguished by the significant terms Sahal and Jebel—سهل و جبل.

The Bellád esh Shukíf is bounded on the

N. by the Lebanon district of Aklím et Tuffa,	} Separated by Litáni or Kasimíyeh river.
S. by Bellád Besháreh,	
E. by Bellád Besháreh and Merj el Ayún,	
W. by Mediterranean.	

The Bellád Besháreh is bounded on the

N. by Bellád esh Shukíf,
 S. by the districts of Acca (Acre), Safed, and El Jebel,
 E. by the Ard el Húleh and Hasbeia district,
 W. by the Mediterranean.

The Merj el Ayún (the Plain of the Springs) is a subdivision of Bellád Besháreh, situate on its N.E. angle.

Area and Aspect.—These districts comprehend an area of about 468 square miles. Their average length from N. to S. is about 26 miles; and average breadth from E. to W. about 18 miles. The shore districts, comprising the celebrated Phœnician plain, rarely exceed 2 miles in breadth. In many places, as at Ras el Abiad, Promontorium Album, and Ras en Nakúra, the mountains come down in bold precipices to the sea.

Physical Aspect.—The general aspect of the maritime tract is that of an interrupted undulating plain, and of the inland districts that of an irregular table-land or plateau, separated by deep narrow wadis or valleys, and studded with hilly elevations. The approximate average

elevation above the level of the sea cannot exceed 2000 feet; while that of the seaboard varies from a few feet to 300 feet. The mountainous region attains an approximate maximum elevation, in its northern portions, of about 4500 feet. It is formed by the southerly continuation of the Libanus and Anti-Libanus chains, which almost unite in the elevated plain of Merj el Ayún, being separated only by the deep and narrow gorge of the Litáni, in which the broad valley of the Bekaa (Cælo-Syria) tails off southerly and westerly to the Mediterranean.

The Lebanon line of elevation does not cease, as often supposed, in the vicinity of Acre and Nazareth; but is continued, with some dislocations, through Judea, and east of Gaza, into the deserts of Egypt, whence it may be still traced, though occasionally indistinct, into the wastes of Lybia.

The mountainous land does not rise in regular terraces from the coast, but by irregularly sloping elevations. Their external configuration more approaches the undulating and tabular than the indented or pinnacled. The general line of elevation runs nearly S. 10° W. The general slope to the Mediterranean is from 3° to 4° ; that to the Jordan, on the east, has a greater inclination.

Valleys and Rivers.—There is no longitudinal valley, properly so called, which separates this mountain tract throughout the whole of its extent. Those of El Khiam and the Litáni, to the west of the Merj el Ayún, and Wadi el Ujayer, are the most considerable.

The transverse valleys are numerous and remarkable, being in general extremely deep, narrow, and with precipitous sides. The valley of the Litáni, after running nearly S. by W. for the greater part of its course, terminates in a transverse valley, a little above the latitude of Tyre, and thence runs, zigzagging, W. by N. to the sea. It forms a tremendous gorge, nearly 1000 feet deep. These transverse cracks in the strata constitute the principal drainage lines by which the water is carried off, westward to the sea, and eastward into the basin of the Jordan.

The principal river running to the sea is the Litáni, just mentioned, and the Nahr ez Zahráni. The first has its rise near Anjar, in the vicinity of Baalbec; thence, after draining the valley of Cælo-Syria, it enters Bollad Besháreh at its N. E. angle, near the Merj el Ayún, and takes the name of Kasimiyeh (signifying a separator) to the sea, where it debouches about 4 miles northerly from Tyre. This river is about the size of the Dove. Slow and sluggish in the valley of the Bekaa, it has here all the characteristics of a mountain stream; below the Castle of Shukif it presented, in the mouth of May, a rapid

torrent of turbid water, nearly white from the abrasion of the chalky cliffs; 25 paces broad, and quite unfordable. It was crossed by a stone bridge of two arches, slightly pointed, 62 paces long by 4 broad; this bridge was called Jesr Kherdeli by my muleteer. Above the bridge the stream was broken by several small islets. The remains of a guard tower stood on the left bank. Near the coast the Kasimíyeh finds its way to the sea through a low belt of sand, in a meandering stream of considerable depth, and 7 paces broad; it is there crossed by a good bridge of one arch. This river is the ancient Leontes.

The Zahrání زهرانی is a stream about one-third the size of the Kasimíyeh, and is generally fordable. It has its rise in the hills near Jezzin, about 13 miles direct distance easterly from Sidon, from which town its embouchure lies about 4 miles S. by W. Its bed among the mountains is often literally concealed amid luxuriant bouquets of the pink-flowering oleander. Its general course is nearly west.

The drainage easterly is carried to the Jordan and Lake Húleh by numerous small rivulets, among which that of Zúk is the most considerable.

Geology.—The principal rock spreading over this part of Palestine is the marine limestone of Lebanon, interstratified with beds of scaglia, marl, and calcareous sandstone. Organic remains are rarer here than in the Lebanon; but they exist in sufficient number to identify the two formations. Flint and chert occur in layers, and geodes of quartz abound in the marly beds.

These strata have been penetrated and altered by dykes of basalt, both cellular like that of the Houran, and compact.

This volcanic rock is seldom seen in the tracts under description, except in or near lines of dislocation or fracture—phenomena with which it appears to be intimately connected, as well as with the fearful earthquakes by which the crust of the Holy Land has been rent from the time of the catastrophe of Sodom and Gomorrah, and the Crucifixion, up to the present hour. Midway down, and at the bottom of the great fissure of the Litáni, below the Castle of Shukif on the left side, below the village of Ulieh, a great outburst of trap occurs, overlaid by the friable red and variegated sandstone with which it is often associated in the Lebanon.

Considerable dislocation of the strata occurs in the line of this great transverse fissure. On the southern bank of the river are seen cliffs of the red sandstone, while the limestone occupies a similar and much greater height on the opposite side.

A few miles to the south of this region, in the direction of Safed, Messrs. Robinson and Smith¹ noticed, in the high open plain near Kadita, heaps of black stones and lava surrounding what had evidently been once the crater of a volcano. They describe it as an oval basin sunk in the plain, in the direction from S.W. by S. to N.W. by N., between 300 and 400 feet in length, and about 120 feet in breadth; the depth about 40 feet. The sides are of lava, shelving, but steep and rugged: in them Mr. Hebard recognised lavas of three different epochs. A sort of outlet occurs in the N.W. side. The basin is sometimes filled with water, but then it contained nothing but mud. All around it are the traces of its former action exhibited in the strata of lava and the vast masses of volcanic stones.

The valley of the Jordan, on the east skirts of this district, above the Lake Húleh, I found to be almost entirely composed of alluvial deposit, resting on rugged coulées of basalt, in which the Lake Húleh itself probably occupies a great engulphment or sinking-in.

The volcanic action on the limestone has produced a vast quantity of calcedonies, agates, jaspers, and cherts, in the vicinity of these outbursts. Silicified wood is seen occasionally in the sandstone, associated with the basalt.

The limestone in the vicinity of the sea is often overlaid by beds of conglomerate, formed of pebbles, rounded and angular, derived from the harder and more siliceous portions of the limestone, and a few pebbles of basalt, cemented by a travertin-like paste. These beds rarely extend any great distance inland; they are occasionally found at 300 or 400 feet above the sea's level. One of the most considerable of these deposits is found to the north of Ras en Nákúreh. The beds are generally horizontal. The dip of the limestone strata is usually westerly, though various and confused from volcanic disturbance; sometimes the strata are nearly horizontal, at others vertical. At Ras en Nakúreh the dip was 6° westerly.

Soil.—The soil covering these rocks is usually of a light reddish brown, varying generally with the nature of the subjacent rock; redder and more ferruginous where the basalt outcrops, whiter and more marly in the vicinity of the scaglia limestone. A fine sheet of dark vegetable mould covers the maritime plain north of Ras el Abiad.

The Merj el Ayún is for the most part a plateau of limestone, on which rests a rich red loam, smiling with vineyards, gardens, and wheat-fields; the vine thrives also in the marly soils, but still better

¹ Vol. III., pp. 367, 368.

in the red volcanic soils. The dark vegetable loam is the best calculated for the culture of cotton. Wheat, millet, beans, tobacco, and lentils (addas) are the staple articles of cultivation, both in the low plains and the high plateaus. The vine and olive flourish on the high plains and mountain sides; a little cotton is grown in the low maritime tracts.

The table-lands are generally naked of trees, but on the loftiest summits are found the juniper and pine. The high valleys and mountain sides are verdant with the evergreen oak (andrachnes); the terebinth and carob trees, oleanders, and the Oriental plane, shade the streams; while the low maritime tracts abound with salsolas, squills, and anemonies.

Government.—These districts are under the Turkish Pasha of Sidon, whose present residence is Beyrút; but the immediate chief of Bellád esh Shukif is Hussain Amin, of the house or tribe of Beit Ali, who resides at Nabatieh et Tahta. The chiefs of Bellád Besháreh and the Merj el Ayún are Hamed el Bey and Hussan Selman, who resides at Tibnín. They are all Metáwalis of high descent. The villages are separately under their respective Sheikhs, who are responsible to these chiefs, and the latter to the Pasha, for their several districts.

Population.—By far the greater part of the population is Metáwali, a sect of Shiites, intermingled with Greek, Greek Catholic, and Maronite Christians, and also a few Druses and Arab Mussulmans of the Sunni sect. The prevailing character of the population is marked, in the list appended, by the letters M, C, D, A, for Metáwali, Christian, Druse, and Arab, prefixed to the name of the village.

The approximate total population, as far as could be gleaned from the imperfect account of some of the Sheikhs, amounts only to 15,000, or little more than 30 to the square mile; that of the whole of Syria, calculated at 1,500,000 souls, amounts to about the same per square mile.

The towns of Tyre and Sidon are under separate Mútsellims, quite distinct from the Metáwali chiefs of districts. The present approximate population of Tyre amounts to about 4100 souls, of whom about

2000	are Greek Catholics
50	„ Greeks
50	„ Maronites
2000	„ Metáwalis.
<hr/>	
4100	

The approximate population of Sidon is greater than that of Tyre, viz:—

Mussulmans	3500
Greek Catholics	2000
Greeks (Rúmí)	40
Maronites	1200
Jews	400
Latins	50
Metáwali	20
Floating (Sailors, &c.)	400
	<hr/>
	7610

The principal export from Tyre and Sidon at the present day is tobacco—an article of commerce unknown in the palmy days of these once greatest maritime cities of the world: fruits, honey, silk, cotton, timber, firwood, and nut-galls, are also articles of export. Beyrút has latterly taken away much of the trade of Sidon. The crimsons and purples of Tyre no longer exist, though the shell producing the dye is found on the coast. I examined carefully the cavities, taken by Mr. Wylde for the dye-pots of the Tyrians, close to the sea, and find them to be natural rock basins in the rugged limestone rock, excavated by the action of the tide. They occur in various places along the whole coast of Syria, from the mouth of the Orontes to Gaza. The tidal wave washes into these cavities fragments of shells and sand, which, in process of time, become cemented into a breccia by the chemical action of the sea-water salts on the limestone. The shells are not confined to the species producing the dye, but consist indiscriminately of all shells that may happen to fall within the reach of the wave.

I took a boat to visit the submerged ruins of Tyre described by M. Berton; but found only a reef of the rugged limestone of the coast. There can, however, be no question that the surface of the peninsula has been subject to oscillation, as is evident from the numerous columns and foundations that are now covered by the sea, at a distance of several paces from the shore, particularly on the southern and western extremities of the peninsula, “destroyed in the midst of the sea.” But by far the greater portion of the old city lies buried under the drift sands, a little to the east of the present town; it forms an inexhaustible quarry, whence materials are taken to build and increase Beyrút, and other towns on the coast. A magnificent wall of finely-cut rusticated masonry, which appears to have crossed the peninsula from north to south, has lately been discovered under

the sands. The modern Tyrians were busily engaged in transporting the materials of this portion of their ancient city to repair the breaches made by Sir R. Stopford and Commodore Napier in the walls of St. Jean d'Acre.

"Is this your joyous city, whose antiquity is of ancient days? Her own feet shall carry her afar off to sojourn." (Isaiah xxiii. 7.) "They shall lay thy stones, and thy timber, and thy dust in the midst of the water." (Ezek. xxvi. 12.)

In the vicinity, the remains of baths with tessellated pavements, and the foundations and pillars of a small temple, had been recently dug up, as well as the mutilated torso of a marble statue of Minerva, as large as life; the drapery is exquisitely done, and is confined on the bosom by a Medusa's head. This piece of statuary is in possession of a native of Tyre, living in the house called Beit Jubbúr. I mentioned the circumstance to Colonel Rose and to Mr. Moore, our Consul at Beyrút, and hope that this interesting relic of Grecian art in Tyre may be preserved from still further mutilation.

Of Christian Tyre there still remain the ruins of a fine cathedral, supposed by Maundrell to be the structure erected by Paulinus, Bishop of Tyre, in the commencement of the fourth century, for which Eusebius, who describes it as the most splendid of all the temples in Phœnicia, wrote a consecration sermon. Here probably, as Robinson and Smith observe, were entombed the bones of the Emperor Frederick Barbarossa, drowned in the Calycadnus on his march to the Holy Land, 1190 A.D. Robinson and Smith judged the length of this structure to have been not less than 250 feet, and its height 150. I availed myself of a better opportunity than these travellers possessed of measuring it both from the inside, and also from the exterior, by going round through the gate of the Turkish wall, and found it to measure 216 feet by 132 feet. Part of the Bema on the east side is still standing: the height and massiveness of the walls, and the large prostrate pillars of granite, proclaim this structure to have been one of the most magnificent cathedrals of Syria.

Of ancient Sidon little remains save her rock tombs, and the numerous pillars of granite and marble seen scattered in all parts of the town.

"Be thou ashamed, O Zidon, for the sea hath spoken, even the strength of the sea." (Isaiah xxiii. 4.) "Son of man, set thy face against Zidon, and prophesy against it." (Ezekiel xxviii. 21.)

Remarkable places in the interior.—Among the most remarkable places in the mountain districts are the castles of Tibnín, Húnín, Shemmaa, and Márón, in Bellád Besháreh; and that of Shukíf, in

Bellád Shukíf. That of Húnín protected the eastern entrance of the country from Banias and the valley of the Jordan; that of Shemmas, which stands on a lofty mountain overlooking Ras el Abiad, held the key of the maritime pass from the south; Márón guarded the pass east from Tyre; while the strong fortresses of Tibnín and Shukíf held in subjection the high fertile intervening table-lands.

Tibnín is the Toron of the Crusades, built, according to William of Tyre, A.D. 1107, by the Christian chief of Tiberias, Hugh of St. Omer. Saladin took it after a siege of six days, A.D. 1187, after his fatal victory over the Crusaders at Hattin. In 1197-8 it was besieged for nearly two months by the Duke of Brabant without success, though it subsequently came into the possession of the Christians, but finally surrendered to Bibars, A.D. 1266. Nau passed by in 1674, Robinson and Smith in 1838, but these travellers did not visit the castle.

The castle of Shukíf figures in the history of the Crusades under the name of Belfort or Beaufort, and gives its ancient Arabic name to the district. Here the Christian knights, after their repulse by Saladin at Banias, fled for refuge, trusting to its prodigious strength. The place did not fall into the hands of their victor until A.D. 1189, when it was surrendered, on honourable terms, by Raynald of Sidon, the garrison retiring unmolested. It was restored A.D. 1240, but retaken in A.D. 1268 by Bibars after a determined resistance on the part of the Templars. No mention of this fortress occurs after the time of Ed Dhahiri, till Burckhardt heard of it in A.D. 1810. Mr. Buckingham passed near it *en route* from Banias to Sidon; and Messrs. Robinson and Smith saw it at a considerable distance when passing from Safed to Tyre. I visited it *en route* from Hasbeia to Sidon in 1846, and passed the night at the adjacent village of Arnún, whence the fortress is called by Abulfeda, "Esh Shukíf Arnún." The village is 20 minutes walk N. 20° W. on the table-land below the castle. The latter stands on the edge of a precipice, nearly 1000 feet above the Litáni, which roars in the depth of the gorge at the base of this fearful scarp, on its right or western bank. The castle is a mass of dilapidated masonry in the style of the middle ages, running N.E. and S.W., about 160 paces long, and from 50 to 55 paces broad. On the S.E. side the wall rises in a line with the rock from the brink of the precipice, and is defended on the other flanks by a deep fosse excavated in the rock. The entrance appears to have been on the S.W. side, but is now blocked up by rubbish. The slide of the portcullis, a turret and passage for drawing up letters from below still remain. The wall is from 7 to 15 feet thick, loop-holed in various places, and

flanked by both square and round towers; the latter are of rusticated masonry with bases shaped like truncated cones. On the S.E. side the wall is double, and here are many out offices, stables, souterrains, and a rock-cut cistern. There is also a cistern on the opposite side, and out beyond the ditch the remains of a small town, evidently used by the vassals and retainers of the castle. Near the S. angle, are three grottos, excavated in the rock, and in front of the entrance runs an elevated terrace. The interior presents heaps of ruins, among which still stands the hall of audience, a massive building with a handsome arched entrance, and a groined roof supported by octangular pillars; the apartment is about 30 feet by 20 feet. Near the castle are the remains of two old watch towers.

I entered the castle with some difficulty by an intricate passage leading up a tower on the S. angle. The conical knoll which it crowns rises about 200 feet above the surface of the high plateau to the N. Messrs. Robinson and Smith appear to have been misinformed in stating the castle to be the residence of the Metáwali Sheikhs of the district¹; it has been totally deserted for many years save occasionally by wandering tribes of Naners (Gypsies). The Sheikhs probably once resided at the village of Arnún.

Kalaat esh Shukíf has been erroneously placed in Robinson and Smith's map several miles to the N.E. of its true position. M. Kiepert, who constructed the map, appears fully sensible of the difficulties he had to encounter in laying down this part of Palestine from these travellers' observations, as will appear from his memoir on the map.² The want of exactness in the notation of the course has caused a deviation which would place Safed four or five minutes farther east than is possible according to Jacotin's map, or according to the more southern routes of these travellers themselves. Unfortunately, this uncertainty, M. Kiepert goes on to say, affects also the important position of Kalaat esh Shukíf; in this, however, the American travellers are not to blame, for I have every reason to believe that their bearing taken from Haddáta is correct, but am ignorant of the authority on which M. Kiepert has placed Esh Shukíf at so great a distance in the line of this bearing, to the N. 40° E. of Haddáta. My own routes, and more especially the intersection of my own bearing of Esh Shukíf, (taken at Banias and afterwards verified at Shukíf itself,) with that of Messrs. Robinson and Smith from Haddáta, would place it, as before said, several miles nearer the latter place. Esh Shukíf I found to

¹ Vol. III., pp. 376, 377.

² Appendix B (Bib. Res.), p. 51.

bear W. 1° N. from the castle of Banias; the instrument used was a prismatic surveying compass, by Troughton and Simms. The course of the Litáni too appears too far to the south.

The castle of Márón stands on a hill about 300 feet high, commanding the pass of Wadi Buſſye, about 10 miles easterly from Tyre. It consists of a wall of solid masonry from 15 to 20 feet high, flanked by semicircular towers, comprising an area of about 198 paces long, and from 62 to 95 broad; the entrance is on the N.W. side, and is provided with a slide for a portcullis; the area inside is occupied partly by ruins and partly by the huts of a small village. The castle appears never to have been finished; the style is that of the Crusades. This Márón is not to be confounded with that to the S.E., on the road from Safed to Tyre.

Ancient Geography.—The districts under description formed part of the territory allotted to Canaan, one of the sons of Ham. On the division of the Promised Land in the time of Joshua, this part of Canaan, from the Great Sidon on the north to Mount Carmel on the south, fell to the tribe of Asher¹; while the eastern tracts, on the western banks of the Jordan, became the portion of Zebulon and Naphthali. "Neither did Asher drive out the inhabitants of Accho, nor the inhabitants of Sidon, nor of Ahlab, nor of Achzib, nor of Helbah, nor of Aphek, nor of Rehob." (Judges i. 31.)

In David's reign, Tyre appears as a maritime kingdom, under Hiram². After the rebellion of the ten tribes, and their being carried away into captivity by the King of Assyria, the provinces belonging to Asher in the interior were comprehended in Galilee, and the maritime tracts remained separate, under the name of the Coasts of Tyre and Sidon.

Sidon, the first-born of Canaan, gave his name to the city he founded, and of which Tyre was a colony. The first mention of Tyre occurs in the Book of Joshua as belonging to Asher³. Isaiah⁴ significantly styles this great city the "daughter of Zidon." Homer is silent respecting Tyre, though the immortal bard notices Sidon more than once in both Iliad and Odyssey⁵.

These two great cities are easily recognised throughout the revolutions of ages in the present Sûr and Saida. Accho, Achzib (Ecdippa), Alexandroschenæ, and Zarephath or Sarepta on the coast, have been found in the present Acca (Acre), Ez Zib, Iskandriyeh, and

¹ Joshua xix. 16—39.

³ Joshua xix. 29.

² Chronicles xiv. 1.

⁴ Isaiah xxiii. 12.

⁵ Iliad vi. 289, and xxiii. 743; Odys. iv. 54, and xv. 114.

Surafend; while the remains at Adlán are supposed to mark the site of the small city of Ornithopolis. Kánah is doubtless the Kaneh of the Book of Joshua; its Arabic orthography كانه in my lists approaches the original Hebrew more closely than the Kana كان of Robinson and Smith, though the places are probably identical.

The town of Achshaph and Hali, mentioned by Joshua¹ as belonging to Asher, may probably be found in Esh Shukíf and Hail; Madon² in Márón; the Meareh³ of the Sidonians in Maarekeh; Misrephoth-maim⁴ in Mezraah; Remmon-methoar⁵ and Hannathon in Kefr Rummán and Anáta; Janoah⁶, which the King of Assyria took, with Ijon, Abel-beth-Maachah, Kedesh, and Hazor, in Yanoah; Ijon Messrs. Robinson and Smith find in Merj Ayún, and Abel-beth-Maachah in Abil el Hawa. Abel-maim⁷ may probably be identified with Abil el Kamh.

My friend the Rev. Mr. Thomson of Beyrút, suggested to me the examination of Húnín as the site of the great Hazor, so celebrated in the days of Joshua and subsequently. I am, however, inclined to think that Hazor lay farther east, and that its site is pointed out by a mound in the valley of the Jordan, between Hasbeia and Banias, called by the Arabs Tel Gházór تل غازور. The sites of Aphek, Rehob, Um-mah, Ramah, Hosah, Hebron, and Neiel—all cities of Asher—are still unfixed.

In the routes subjoined, the rate at which I travelled was about 2 miles an hour in the mountains, and about $2\frac{3}{4}$ to $3\frac{1}{4}$ along the coast. The variation of compass I found to be nearly 9° West.

•
• No. I.—*Route from Acre to Tyre.*

N.B.—This route was travelled quicker than that from Tyre to Sidon.

	H. M.
By sea-side, plain bounded by hills to east.	
Jezzar's aqueduct crosses road, Munshiah on right - - -	0 20
Still along plain, near sea, cross rivulet, Jezzar's aqueduct on right - - - - -	0 30
Samariyeh, surrounded by gardens and fig orchards - - -	0 15
Foundations of ancient site, gardens - - - - -	0 15
Carried forward - - -	1 20

¹ Joshua xix. 25, 27.

² Joshua xi. 1.

³ Joshua xiii. 4.

⁴ Joshua xi. 8.

⁵ Joshua xix. 13, 14.

⁶ 2 Kings xv. 29.

⁷ 2 Chron. xvi. 4.

	H.	M.
Brought forward - - - - -	1	20
Rivulet of El Mabshúk (Mafshur of maps), stone causeway, banks flat and swampy - - - - -	0	24
Ez Zib (Ecdippa), $\frac{1}{4}$ mile on left, near sea, springs, Hamsen on right - - - - -	0	36
Busseh, a mile on right, on flank of promontory - - - - -	0	46
Springs of Ain el Meshershí, south of Ras en Nakúreh, reef $\frac{1}{2}$ mile out at sea - - - - -	0	9
[From Acre to this the road has been across the mouth of a sandy plain, well cultivated with gardens, vineyards, and olive groves, and watered by rills from the hills, which bound it about two or three miles to eastward. These hills now bend down to the coast, forming the promontory of Ras en Nakúreh, the natural and political boundary between Acre and Bellád Besháreh.]		
Ascent of Ras en Nakúreh begins, steep - - - - -	0	9
[The sea has made a deep indentation on the chalky limestone face of the promontory—ascent steep.]		
Top of promontory; on left, precipice 100 feet high, washed by sea; mountains on right, clothed with dwarf evergreen oak; fine view of Tyre and Lebanon - - - - -	0	8
Bottom of first descent - - - - -	0	12
Descent more gradual to rivulet, crossed by old Roman bridge -	0	16
Bottom of second descent; puddingstone overlies limestone -	0	15
Khan and village of En Nakúreh; village to right of road -	0	15
Along plain, near sea-side; traces of Roman road and aqueduct to the springs of Ain Iscandriyeh (Alexandroschenæ) -	1	10
[Here are massive foundations scattered round fine springs, over which a beehive-like stone structure has been raised, 12 feet high, and 16 paces in circumference; the remains of an arch and conduit stand close by; the water flows into a fountain below, from which it escapes in two miniature cascades; it bears the date ۲۲۹. A little beyond the ruins commences the ascent of Ras el Abiad (Promontorium Album).]		
Top of ascent, tower at top, Kalaat esh Shemmaa to right -	0	20
Bottom of descent, rock, chalky limestone, with flints near sea, overlaid with thin beds of puddingstone; dip of limestone 6° West - - - - -	0	12
Village of Mansureh to right; foundations of ancient site,		
Carried forward - - - - -	6	12

	H.	M.
Brought forward - -	6	12
called El Humnam (Sheberieh of maps); rivulet of Wadi et Tineh - - - - -	0	15
Hills recede, leaving a maritime plain, a mile broad - -	0	26
[On left of road, remains of Roman aqueduct, and fine bridge; the latter had two arches; a portion of one is standing; its span $7\frac{1}{2}$ paces. The masonry extremely massive and solid, rubble encased with cut stones, all firmly cemented. The rivulet it crosses appears to have been anciently much larger than at present. Soil, fine dark vegetable mould.]		
Ras el Ain (Solomon's Pools) - - - - -	0	40
Over plain, cross rivulet of Solomon's Pools, and along sandy isthmus to Tyre - - - - -	1	0
Total - -	8	33

General direction of course from Acre to Ras el Ain, N. 10° E.

Ditto ditto from Ras el Ain to Tyre, N. 15° W.

No. II.—*Route from Tyre to Sidon.*

Along north side of sandy isthmus to spring - - - -	0	33
Along maritime plain to Khan Kasimiyeh, on left bank of Ka- simiyeh; cross river by stone bridge of one arch, modern; river 7 paces broad - - - - -	1	10
Along Phœnician plain to dry channel of rivulet, Abu el Aswad; ruins of small Roman bridge and Saracenic khan - -	1	0
Foundations and heaps of stones, called Kherbet Adlân - -	0	43

[In the adjacent rocks are sepulchral grots, like the simpler description of grots near Jerusalem, consisting generally of a rectangular chamber, 7 or 8 feet long, with a door on one side, and on the three others benches for sarcophagi, or sepulchral niches and soroi. Adlân is supposed to be the site of Ornithopolis.]

Dry bed of stream - - - - -	0	48
Khan El Khudr and Wali - - - - -	0	25

[Near sea-shore, a little to north, are foundations and heaps of stones, among which are some fragments of columns. On the right, on the side of the hills, stands the modern village of Surafend: the foundations below are supposed to mark the site of the Sarepta of the New Testament and Zarephath of the Old.]

Carried forward - -	4	39
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	H.	M.
Brought forward - -	4	39
Along plain, near sea-shore, to Ain Kantereh springs - -	0	23
Along plain, near sea-shore, to Ain el Burák, khan, springs, and gardens - - - - -	0	45
Forded Nahr ez Zahrani, 1 foot deep, 75 paces broad - -	0	28
Forded Nahr es Sanik, dry—a khan and guard-house - -	1	10
Prostrate Roman mile-stone, with Latin inscription, bearing names of Severus and Pertinax, copied by Maundrell - -	0	5
Pass Ain el Ghannim, streamlet of El Burghut, through luxuriant gardens, to Sidon - - - - -	0	30
Total - -	8	0

General direction of course from Tyre to Khan Kasimiyeh, N. 59° E.

Ditto ditto from Khan Kasimiyeh to Sidon, N. 7° E.

No. III.—*Route from Tyre to Banias.*

Along sandy isthmus to village of Maashuk - - - -	0	20
Ascend hills to village and tower of El Burj - - - -	0	25
Maasereh on plateau, covered with dark soil; Chernaye on left, Hiran and Baal on right - - - - -	0	25
Descend into Wadi Bir Lahmeh, village of Bazurieh a mile on right - - - - -	0	14
Bottom of descent - - - - -	0	5
Up Wadi Bir Lahmeh, which opens into wide valley of Yanoah; Wadi Jilu branches off to south-east to Ain Maarekeh; near top of wadi, on left, valley covered with fig-trees, vineyards, and orange-groves; spring - - - - -	0	29
Top of Wadi Yanoah - - - - -	0	5
Along mountain side, Wadi Berish on left, spring of Ain Berish at the bottom of wadi, village of Berish on opposite side of valley - - - - -	0	25
Descend to left into Wadi Bufiye, wheat and fig cultivation - -	0	24
Village of Bufiye - - - - -	0	10
Castle of Maron on hill - - - - -	0	50

Bearings from Castle of Maron.

Terherfa - - - -	S. $\frac{1}{2}$ mile apparent distance.
Súlah - - - -	W. $21\frac{1}{2}^{\circ}$ S., on hill, $2\frac{1}{2}$ miles ditto.
Mt. Hermon (Gebel Sheikh) E. 17° N.	
Nafákhiéh - - - -	W. 40° N., 2 miles.

Carried forward - - 3 52

	H. M.
Brought forward - -	3 52
Hence ascend Wadi Buſſye or Maron to table-land, wadi well cultivated; village of Etweiri on left $\frac{1}{2}$ a mile, and 3 miles farther, in same direction, Afrún - - - -	0 15
Tulin, $1\frac{1}{2}$ mile on right, in Wadi Khibet Selim; and beyond rises in distance the Castle of Tibnin; east of Tibnin, on same elevated land, lie the villages of Abrilla and Merkaba. Here is the watershed between sea and valley of Jordan - - - -	0 9
Descend from plateau into Wadi el Ujayer; Aiddib a mile to right, near commencement of wadi - - - -	0 11
Ain Aiddib, spring at bottom of wadi, which runs north-easterly towards the Litani gorge; descend through oak forest to Wadi el Ujayer - - - -	0 11
Ujayer brook at bottom of wadi, clear and rapid, 4 paces broad, 6 inches deep, runs to Litani; crossed to east or right bank; its source is said to lie about $1\frac{1}{2}$ hour up the wadi, to the south-west; ascend to top of pass; open plateau studded with olive trees, wheat cultivation; hence Castle of Shukif bears E. 40° N. - - - -	0 55
Plateau; Tarbi $\frac{1}{4}$ mile to left; Tolusa 1 mile to right - -	0 26
Merkaba on right, 2 miles - - - -	0 19
Descend into valley, running south-west, well wooded and cultivated; on descent, a rude tomb, like a cromlech - -	0 20
Encampment in middle of valley - - - -	0 15
Up opposite side of valley to Adeish - - - -	0 15
Top of pass, and commencement of descent towards valley of the Jordan, or Hasbeia River; Wadi et Teim - - -	0 9
Aintulli on left - - - -	0 36
Abil el Kamh, on saddle of hill to left, across defile—apparent direct distance 1 mile - - - -	0 24
Bottom of descent into valley of Jordan; copious springs form a rivulet, which runs to the Húleh Lake - - -	0 5
Across valley of Jordan; cross Zuk rivulet, running southerly, by stone bridge of one pointed arch; brook, 6 paces wide, 2 feet deep, clear and rapid, bed basalt, soil coffee-coloured; oleander, willow, and wild raspberry on banks; foundations of ancient site on right, and of a more modern village - - - -	0 35
Carried forward - -	8 57

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	M.	M.
Brought forward - -	8	57
Cross marshy and grass-covered flat to Jordan, or River of Hasbeia, 30 paces broad, and from 2 to 4 feet deep, clear and rapid; solid stone bridge of 3 arches, 65 paces long, and 4 paces broad - - - - -	0	50
[The river here flows in a crevasse of basalt, with precipitous sides, from 15 to 60 feet high, and 70 paces wide; the bottom marshy, and shaded with willow, raspberry, oleander, and oriental plane. A little above the bridge the river falls over a ledge of basalt, about 2 feet high.]		
Cross rivulet - - - - -	0	28
Tel el Kadi - - - - -	0	15
Banias - - - - -	0	45
Total - -	11	15

The general direction of the route from Tyre to the top of the ridge overlooking the Jordan, or Hasbeia River, was about nearly east; and thence to the town of Banias about E. 22° S. The course in the mountains tortuous.

No. IV.—Route from Hasbeia to Castle of Shukif.

Down rugged channel of stream to bridge of Zuk, over Hasbeia River; bridge 2 if not 3 arches, 45 paces long, $\frac{3}{4}$ paces broad; stream 16 paces broad, 1 foot deep; above bridge turned off by stone Anicut to turn a mill; limestone -	0	20
From bridge ascend hills to bitumen pits, Biar el Hommar -	0	12
Descend to road by village of Kokaba - - - - -	0	15
Ascent to Merj el Ayún, limestone, rich red soil, vineyards; Abil el Hawa 1 mile to left - - - - -	0	15
Cross vine-covered Merj el Ayún to top of low ridge on south- western side - - - - -	0	47
Short descent and ascent to Jedeidah, in Wadi Merj el Khi- yam, $\frac{1}{2}$ mile on left; on right is Dibbin and Khiyam, and beyond lies Belát - - - - -	0	22
Along ridge of limestone; below in valley, on left, Tel Derdera Ulieh, on south-eastern brink of Litáni gorge; Castle of Shukif bears W. 16° S. - - - - -	0	45
Carried forward - -	3	2

	Brought forward	H. M.
	-	3 2
Down deep gorge to Litáni at bottom, crossed by Bridge of Kherdeli	-	0 46
Up opposite steep bank, by circuitous route to north to village of Arnún, whence the castle bears S. 20° E., about a mile off	-	1 0
	Total	4 48

Bearings from Castle of Shukif.

Castle of Banias	-	E. 31° S.
Nabatíeh el Foká	-	N. 30° W.
Shukín	-	N. 58° W.
Arnún	-	N. 20° W.
Birket el Kebír	-	N. 35° W.
Deir Mimias	-	N. apparent distance 2 miles.
Myfedún	-	W. 10° N.

The general direction of course from Hasbeia to the bridge nearly W.; thence to Biar el Hommar W. by S.; thence to the road S. E.; and thence, up ridge and across Merj el Ayún to Uliéh, about S. W. The direct distance across the gorge from Uliéh to the Castle of Shukif may be about 1½ mile: the castle bears, as before said, W. 16° S. from ridge of Uliéh.

No. V.—*Route from Castle of Shukif to Sidon.*

Over partially cultivated limestone plateau to rain-water pond of Birket el Kebir, 180 paces in circumference; Kefr Tibnit ¼ mile to right	-	0 35
Pass Nabatieh el Foka, on hill close to left of road; large village, white tombs	-	0 25
Down Wadi Nabatieh to Nabatieh et Tahta	-	0 22
Down Wadi Nabatieh; wadi narrows, becomes clothed with low oak forest, and flanked by round hills of limestone to Ziphtieh on left; Deir ez Zahrani and Wadi Zahrani to right	-	2 37
Khan Mahomed Ali	-	0 38
Down south side of Wadi Zahrani to opposite Aktenib, on opposite side	-	0 51
Spring of Ain Aktenib; a little below crossed Zahrani rivalet at bottom of wadi, shaded by a profusion of oleanders in flower and plane trees; stream clear and shallow	-	0 15
	Carried forward	5 48

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	Brought forward -	N. M.
	-	5 43
Ascend opposite side of wadi to table-land; wheat cultivation -	0	22
Ghazieh on ridge, to right; hence Sidon bears N. 15° E. -	0	13
Gentle descent down mountain side; cross Ghazieh rivulet -	0	23
Cross Sanik stream - - - - -	0	45
Cross Burghut rivulet to Sidon - - - - -	0	35
	Total -	8 1

The general direction of the course to Nabatieh el Foká was N. 30° W.; thence to Ziphtieh about N. 10° W.; from Ziphtieh to the opposite side of the Zahráni valley about W. by N.; and thence to Sidon N. 15° E.

DISTRICT OF BELLAD BESHAREH بلاد بيشاره

Villages on the Coast.

M., C ¹ .	Abbásiyeh - - - -	عباسيه
M.	Terdabbá - - - -	طردبا
M.	Juárd en Nakhl - - - -	جوارن النخل
M., C.	Ghazieh - - - -	غزیه
	Hamádiéh - - - -	حمادیه
M.	Shádáníeh - - - -	شادانیه
M.	Bázúrieh - - - -	بازوریه
M.	Ghanni Bakkál - - - -	غنی بقال
M.	Hannáwiyyeh - - - -	حناویه
M.	Burj Abbás - - - -	برج عباس
M.	Burj el Kílib - - - -	برج القیله
M.	Ismáid - - - -	اسماعید
M.	Beít Ulíeh - - - -	بيت اولیه
M.	El Felláwiyyeh - - - -	الفلأویه

¹ The capital letters before the names of places show the character of the population. See p. 353.

M.	Biyút es Synd	-	-	-	بيوت السيد
M.	Nákúreh	-	-	-	ناقورة
M.	Iskanderúná	-	-	-	اسكندرونا
M.	Hámúl	-	-	-	حامول
M.	Kharábat Dizziyeh	-	-	-	خرابث درزيه
M.	Dizziyeh	-	-	-	دزیه
	Maashúk	-	-	-	معشوق

MERJ AYUN *مرج عيون*

C.	Abil el Kamh	-	-	-	أبل القمح
D., C.	Abil el Hawá	-	-	-	أبل هوا
C., M.	El Jedeidch	-	-	-	الجديدة
C.	Buweidheh	-	-	-	بويضة
D., C.	Matalleh	-	-	-	مطله
D.	Sardá	-	-	-	سردا
M.	Kefr Kílí	-	-	-	كفر كيلی
M., C.	El Khíyám	-	-	-	الخيام
M.	Belát	-	-	-	بلاط
C.	Deir Mímás	-	-	-	دير ميماس
C.	El Khirbeh	-	-	-	الخرية
C., M.	Debín	-	-	-	دبين
M.	Houzá	-	-	-	حوزا
	El Kulliah	-	-	-	القليعة

Villages in the Mountains.

	Merkabah	-	-	-	مركبة
C., M.	Kánech	-	-	-	قانه
M.	Atít	-	-	-	عتبت

M.	Dabaár	-	-	-	-	دبعار
C.	Nafákhieh	-	-	-	-	نفاخيه
M.	Daklih	-	-	-	-	دقلبه
M.	Shákhúr	-	-	-	-	شاخور
M.	Burj Kalawieh	-	-	-	-	برج قلوبه
M.	Burj Rihál	-	-	-	-	برج ریحال
M.	Báklíd	-	-	-	-	باقليد
M.	Yátin	-	-	-	-	ياطين
M., C.	Bint Jebeil	-	-	-	-	بنت جبيل
	Rumásh	-	-	-	-	رماش
M.	Yáron	-	-	-	-	يارون
M., C.	Máron	-	-	-	-	مارون
M.	Zibghín	-	-	-	-	زيبغين
M.	Atá	-	-	-	-	عتا
M.	Mijdel	-	-	-	-	مجدل
M.	Shíhín	-	-	-	-	شيكين
M.	Terharfá	-	-	-	-	طرحرقا
A., M.	Hadáná	-	-	-	-	حدانا
A.	Ahríneh	-	-	-	-	احرينه
	Mezraah	-	-	-	-	مزرعه
	Biyádh	-	-	-	-	بياض
	Hadíth	-	-	-	-	حديث
"	Makhshikah	-	-	-	-	مخشكه
	Húnín	-	-	-	-	حونين
	Tibnín	-	-	-	-	تينين
M.	Anáteh	-	-	-	-	عناته
C., M., & Mar.	Ain Nebl	-	-	-	-	عين نبل

M.	Húleh - - - - -	حوله
M.	Hadáteh - - - - -	حداته
	Meis - - - - -	ميس
	Bírish - - - - -	بيرش
M.	Azwezún - - - - -	ازوزون
	Kalaat Márón - - - - -	قلعة مارون
	Maarekah - - - - -	معركة
	Súlah - - - - -	سوله
	Túlin - - - - -	طولن
	Antará - - - - -	انتارا

DISTRICT OF BELLAD SHUKIF بلاد الشقيف.*Villages on or near the Coast.*

M.	Ziftiah - - - - -	زفتيه
M., C.	Basfúr - - - - -	بصفور
M.	Šarfend - - - - -	صرفند
M., C.	Ansár - - - - -	انصار
M.	Kalaat Meis - - - - -	قلعة ميس
M.	Ez Zeríwíeh - - - - -	الزريويه
M., C.	Majeidíleh - - - - -	مجيدله
M.	El Wasmát - - - - -	الوسمات
M.	Tibshá - - - - -	تبسا
C.	El Dáwadíeh - - - - -	الداوديه
M.	Bábalíeh - - - - -	بابليه
M.	Kákabáh Shauíbar - - - - -	قاعبه شنيبر

Villages in the Mountains.

M.	Edzebíeh - - - -	الدضبيعه
M.	Athbá - - - -	عثبا
M.	Damúl - - - -	دمول
M.	Kefr Tibnít - - - -	كفر تمينيت
M.	Yahmúr - - - -	يحمور
M.	Adshít - - - -	عدشيت
	El Biádh - - - -	البياض
	Sherkíeh - - - -	شرقيه
	Shílá Baal - - - -	شيللا بعل
	Deir ez Zahráni - - - -	دير الزهراني
	Dawír - - - -	دوير
	Zibdín - - - -	زبدين
	Kefr Rammán - - - -	كفر رمان
	Kefr Heil - - - -	كفر حيل
	Jabbúsh - - - -	جبوش
	Myfedún - - - -	ميفدون
M., C.	Nabátíeh et Tahtá - - - -	نباطيه التحتا
M.	„ el Fóká - - - -	نباطيه الفوقا
	El Hamrah - - - -	الحمره
	Zótir el Gharbíeh - - - -	زوتر الغربيه
	„ esh Sharkíeh - - - -	زوتر الشرقيه
	Jabshít - - - -	جبشيت
	El Kafúr - - - -	الكفور
	Túl - - - -	تول
	Yánóah - - - -	يانوح

	Hárduf	-	-	-	-	جاردُف
	Deir Nughlah	-	-	-	-	دير نُغْلَه
	El Kákaba el Jesr	-	-	-	-	القاقعبد الجسر
M.	Arnún	-	-	-	-	أرنُون
	Nusf Tamrah	-	-	-	-	نُصف تمره
	Shókín	-	-	-	-	شوكِين
	Kefr Józ	-	-	-	-	كفر جوز

ART. VIII.—*Route from Kashmír, viâ Ladakh, to Yarkand, by Ahmed Shah Nakshahbandi. Translated from the Persian MS. by MR. J. DOWSON.*

[Read June 2, 1849.]

INTRODUCTION.

[The following Itinerary, or account of the route from Kashmír, *viâ* Leh, to Yarkand, is translated from a little Persian MS., written by Ahmed Shah Nakshahbandi, at the request of Lord Elphinstone, and presented to that nobleman at Kashmír, in July, 1846. The author, Ahmed Shah, was the son of Khájah Sháh Niyáz of Kashmír, a man of high reputation and sanctity, who was held in great esteem by the Mohamedans of Yarkand and the surrounding countries, where he had numerous disciples. Ahmed Shah had himself visited the countries he describes, and spent some time in the chief places, his religious character and reputation giving him peculiar advantages for travelling and observing in these countries.

The ground passed over is not entirely new to us. Mr. Moorcroft performed the journey from Leh to Kashmír, and also proceeded a short distance from the former place towards Yarkand; and a detailed account of the whole route from Kashmír to Yarkand is given in the Diary of Mír Izzut ullah, printed in the seventh volume of the Society's Journal. The summer route from Leh to Yarkand, through the Nobra country, is, however, made known to us for the first time by this Itinerary, as Moorcroft and Izzut ullah both travelled by the winter route.

The work was written from recollection, but appears correct and trustworthy; and many of the facts and descriptions given are entirely in accordance with those of Moorcroft and Izzut ullah.]

MERCHANTS going from the city of Kashmír to Ladakh usually carry with them coin, as Mohammed shahi rupees, or silver bullion, as the yambo (sycee silver), or bills, for the purchase of green tea and shawl wool. For the expences of the road and the disbursements in Ladakh, they take broad-cloth, saffron, paper, cottons (both coloured and white), tin thimbles, needles, lack, wax, tobacco, and other articles. For their food they carry with them from Kashmír rice, talkán (linseed?) cakes or biscuits, and butter. On all these things a

duty is levied at the custom-house, and the traders receive a pass from the Darogha, which clears the several stations and ferries on the road. They leave the city on the north by the mahal of Naushehra, and proceed to Gándarbal (گاندربل), about five kos distant, where they receive a passport, agreeably to the practice of former times. On returning from Ladakh with teas and shawl wool, they stay here several days collecting their packages, when they have done which, they announce their arrival to the dároghá. This officer, with the head of the merchants of Ladakh, then repairs to the place, and they pass some time in mutual entertainments, in consequence of which the place has for a long time become the site of a bazar. Since the time of Ranjít Sing, however, the packages are taken on to the city, and the duty is there levied. At the distance of three kos from Gándarbal travellers come to the banks of the Sind river, on both sides of which runs the road, through a cultivated tract mixed with jungle. When they take the right hand of the river, they generally rest at the station of Akhál (اکھال); and when they proceed along the left, after crossing the bridge, they come to the place termed Kaugan (گنگن), where they pass the night.

On the second night they arrive at Gandi Sar Sing (گندی سر سینگ) the house of Malik Abd ur rasúl. It was formerly the custom to pay rahdari or toll to the malik, who was originally a soldier in the service of the former kings, and a mausabdar (fief-holder) and hakim of Ladakh, as which his ancestors have held a jaghir for several generations in Kashmir. From Gándarbal to Ladakh his authority is recognised, and whatever he writes to the raja of Ladakh is complied with. It was his duty to provide portorage for goods as far as the village of Sona marg, through the valley named Nárahwáo (ناره‌واو). The inhabitants of this valley are all carriers, and, under the orders and authority of the malik, supply the merchants with the means of conveying their goods, which are carried sometimes by men and sometimes by horses, under the command of the malik, from the city (of Kashmir) to the town of Dras. In winter the packages cannot be conveyed by horses, on account of the difficulties of the Zojah bál Pass, and are therefore carried by men only. From the city of Kashmir to Ladakh, if the conveyance be by means of men only, the goods arrive safely in a month or a little more; but the porters of Nárahwáo frequently carry the goods as far as Dras, and there give them over to the landholders of that place, who are dependant on the

Ladakh government, and they convey them the remainder of the distance on horses. The duty of conveying goods to Ladakh, and of bringing them from thence, was always under the charge and trust of the above-named malik; but since the appointment of Zoráwar Sing to the government of Ladakh by Ranjít Sing, the ancient usages have been abolished, the malik has been deprived of his jaghir, a thána has been established at his dwelling, and such new regulations introduced as the governor thinks fit.

From the village of Gandi Sar Sing, the road passes along a valley, through which the river Sind flows, and which is part cultivated and part jungle. Having proceeded about three kos, and crossed over a bridge, the village of Gangana-gir (گنگنه کير), on the other side of the river, is reached. In this place the first of the Kashmír custom-houses is situated, and the inhabitants number about fifteen houses. They are all employed in the service of the customs, as writers, clerks, and messengers to the city. They are charged with the duty of examining the miscellaneous goods of the merchants, but the closed and covered packages are carried on to the custom-house at the city. From this place the road proceeds on the right bank of the river Sind, through a valley covered with jungle and rocks. At about the distance of a kos, a place is reached which the people of Kashmír call Hank (هَنك). This is a rocky place, with hills all around, and beneath it the river flows with a very rapid current. Here, on account of the many difficulties of the road, the loads are taken off the horses, and are carried by men to the village of Sona marg (سونہ مرگ). The lands and the hills around this place are covered with perpetual verdure, and the roses, water, and temperature are all most delightful; it has therefore been called Sona marg, or "the golden plateau¹;" marg, in the language of Kashmír, meaning a space at the top of a hill.

From Sona marg to the entrance of the Zojah bál (زوجہ بال) Pass the distance is three kos, the road passing through a waste country, well supplied with water and vegetation, and having a delightful air. At one or two places in this part of the road a capacious inn or caravanserai has been built, as a protection for travellers against the snow and cold which in winter are very severe, and in these houses travellers sometimes take rest and refuge. The place

¹ This agrees with Vigne's derivation; he calls it "the golden hill." Moorcroft, however, says that it is named from Sona-murgh, the golden pheasant.

where these houses are built is called Rangáh (رنګاه). From hence to the pass of Zojah bál the distance is about two miles. It is often necessary to make a halt in the pass, and as there are no inhabitants there, a capacious house has been built on the skirts of the pass. This building is constructed of stone and logs, and is made very strong to resist the weight of the snow which falls upon it from the mountains above: the house is called Mar*. It frequently happens that travellers and caravans become entangled in the pass, and are unable to get through, especially in winter, when the snow is deep; on such occasions they take shelter in this building until they can proceed. The snow, however, is sometimes so deep that they are unable either to go on or return, and are consequently compelled to remain in this house, where they suffer much privation and alarm. There are two roads through the pass: one is practicable in summer only; the other, which passes through a narrow valley, is the one always pursued in winter. This valley is sometimes in winter filled with snow which falls down the sides of the hills, as if through troughs or spouts. In winter, persons passing through the pass, have great dread of the wind and snow.

After emerging from the pass, the traveller arrives towards evening at the village of Matáyan (متايان), which is the first inhabited place in the Ladakh territory, and from ancient times formed part of the jaghir of the malik. In the course of the journey from the pass, an extensive lake is found in the low ground, which in appearance is tranquil, and has no current. The river Sind, which runs by the valley of Náráhwáo to Kashmír, here takes its rise, and half the waters flow off by that channel; the remainder flows towards Ladakh and Iskárdú. The distance from the pass to Matáyan is two stages, through a country rich in water and pasture, to which in summer the herdsmen and shepherds of Kashmír bring their horses, sheep, and other animals for the purpose of grazing.

From Matáyan the road passes to Pándrás (پاندراس), and from thence to the town of Drás (دراس). The mountains are situated only a short distance from these places; but nevertheless there are some extensive valleys rich in vegetation, which are much resorted to by herdsmen and graziers, because horses and other quadrupeds fatten there without corn of any kind. At this place there is a road leading towards Iskárdú, by which the men of that country sometimes ap-

* The Kashméri term for serai.

proach, making forays, and driving away the cattle. The government of the town of Drás is shared by the Malik of Kashmir and the Raja of Tibet.

There are two roads from Drás, one through the Pass of Pirána wári (پیرانہ واری) to the village of Karchu (کرچو), from thence to Sor (سور), and then to Pashkam (پشکم)—the other, without any pass, direct to Pashkam. The distance is five stages, in the course of which there are some villages and cultivated spots which are dependent on Ladakh. In Pashkam there is a custom-house, where they levy duties on the goods and property of the merchants for the Raja of Ladakh. From this place to the frontier of Iskárdú is three days' journey, over a rugged stony country, where it is impossible for strangers to travel without unshod Tibetan horses. The Tibetans, however, do not take off the shoes of their horses, but travel with them shod as usual.

The next place is the village of Malbu (ملبو). Here also there is a Raja kalán minister, and tolls are taken from the merchants.

From Malbu to Láma yáru (لامه یارو) the distance is four stages. In this place there is a Tibetan temple or monastery, the inhabitants of which are all lámas or priests, professing and teaching the Tibetan religion and laws. Women are also received into the sacred order. The male priests are called Lámás, and the women Chomal.

At the distance of one stage from Láma yáru lies the village of Khalchí¹ (کھلچی), close to which flows the large river from Ladakh towards Iskárdú. A strong and substantial bridge is here built over the river. In former times no toll was levied from the merchants who came from Ladakh with green tea and shawl wool; but ten or twenty years ago Khájahí Muhassin Ali, a chief of the Shia sect, and a banker at Ladakh, imposed a duty in the name of the raja, amounting to one rupee on each dom or block of tea, and one rupee on each package of shawl wool; and from his time to the present the toll has been regularly levied. When the toll has been paid, a pass, called lamek in the language of Tibet, is given to the merchants, upon examining which, and finding it to agree with the merchandize, the custom officers of Khalchí allow the goods to pass over the bridge; but if there be any discrepancy, the goods are detained until an order for their being passed is received from Ladakh.

¹ "Khalets"—Moorecroft.

The next village is called Núrullah (نورالله), where, as at Khalchí, apricots and apples are abundant. From Núrullah the road passes to Saspúl (سسپول), and from thence to Bazkoh (بزكوه). Here there is a thanadar, who levies a small toll. Starting from hence, the traveller reaches at night the city of Ladakh.

Ladakh is a city much frequented by merchants; it is for the most part surrounded by mountains, and what level ground there is near it is stony and sandy. The temperature is very cold, and the land abounds so much with rough stones, that they are collected and arranged in piles to form the boundaries of the fields. Notwithstanding this, the sandy plain is cultivated with barley and wheat. Rice and other grains, with butter and meat, are brought with much labour from adjacent parts. Wheat, barley, grass, and fodder grow in the surrounding districts. The fodder is of a peculiar kind, which grows also in Turkistan and Kabul—in Turkistan it is called "bídah ponchakah," in Kabul "ziskah," and in Ladakh "jahanob¹." It is a very excellent food for horses, and they become fat upon it in the course of twenty days or a month without any corn. The mutton of Ladakh is very good, but scarce. The sheep which are employed as beasts of burden to bring the shawl wool from Radakh and the surrounding parts are large and strong, but their flesh is not good, and never becomes tender by cooking; but it is sometimes minced or hashed, and may then be eaten. The water of Ladakh is rather unwholesome. The trade and commerce of the place is chiefly carried on by natives of Kashmír, and consists principally of cloths, morocco leather, embroidered cloths, and silks, which are brought from Zánskar, or by people of the Panjáb from Núrpur and other places, and sold to the merchants of Yarkand. Besides the rája and the kalún, who is his deputy or minister, no one possesses any authority. Among the merchants of Kashmír there has been from old times a dalál, or broker, without whose inspection no trading transaction, whether small or great, can be carried on, and he receives a regular commission or brokerage on the sales. The merchants who import tea from Lassa call it chabah, and it is not the custom for them to sell it to any one except the shamúl or common broker. The merchants who import shawl wool bring it from Radakh, Chán-tan, and parts adjacent, sometimes even from Yarkand, it having been collected in the towns of Khotan. This shawl wool also is not bought or sold without the inspection of the shamúl broker. Some dealers

¹ The "pranges" of Moorcroft.

purchase the shawl wool in the rough uncleaned state, good and bad together; they then separate it from a large quantity of hair which is mixed with it, and after sorting it into different qualities and cleaning it, they make it into packages, and export it at the proper season, by means of hired porters, to Kashmír. The green tea is bought in the same way as the chabah. It is brought in blocks called dom, which are packed in cow-skins. These packages are called charghannah; when they arrive, they are taken home, where the skins are undone, and the tea assorted into various qualities. The packages are again made up in various sizes, according to the season of the year, being lighter in winter and heavier in summer, and the skins being then put over them again, the charghannahs or packages are forwarded to Kashmír.

In Ladakh there are no rupees nor copper coins, but there is a thin silver coin called a jáo, which is equal in value to a quarter of a rupee, and is current as such, four being reckoned as a rupee. These coins bear on one side a legend, importing that they are struck at Tibet, and something more in Tibetan letters, and on the other side the name of the ríja who was established on the throne in the time of Mahmud Shah. A yambo, or bar of sycee silver, is equal to 50 pals of pure silver, and passes current for 180 rupees.

Merchants who intend going on to Yarkand remain in Ladakh a sufficient time to bring their horses into condition. Before setting out, they provide a stock of food and other necessities, sufficient in quantity to supply both men and horses for a period of forty days. If two horses are employed in carrying merchandize, three are required to carry the food; and if ten be laden with goods, there must be fifteen to carry provisions. An equal number of servants, men of Ladakh or Yarkand, is necessary to look after the horses and baggage; without these the journey cannot be performed.

The traveller, on setting out from Ladakh on his way to Yarkand, proceeds in a southern direction, and at the distance of three kos reaches the village of Sabú (سمبو), which is the first resting-place. Near to this village the road proceeds through a very elevated pass, the passage of which occupies one day of great toil. The ascent is here so steep, that horses cannot carry the baggage, and the merchants are consequently obliged to engage some men of Ladakh, who convey the goods through the pass on the back of a species of cow called yak. Having effected the passage over the mountains, a village called Digar (ديگر) is reached, which is the next halting-place. The

people of Sabu call this pass Koh i Sabu (the mountains of Sabu), and the people of these mountains are called Dígar.

After quitting Dígar, the traveller next arrives at the village of Akhkám (اڭكام), which is the last inhabited place of Ladakh; and a short distance farther the road reaches the river Sháyuk (شايب), which rises in the Múzdawán (موزدوان) or Icy Mountains, near Sasír (سسير). For five stages onwards the road passes through a very stony country, possessing a little jungle. The river is crossed several times every day. A place called Láma kinti (لامه كنتي), which is a village dependant on Ladakh, but containing only a few inhabitants, is then reached. This place is situated on an eminence, by the side of the river.

When the caravans arrive here from Yarkand, the travellers experience great pleasure, from their near approach to an inhabited and cultivated country, and they remain one or two days to rest from the fatigues of their journey.

Setting out from hence towards Yarkand, the village called Chong jangal, i.e. "great jungle," (چونگ جنكل) is next reached; and from this place to the pass of Karah karam (قرو كرم) the distance is about ten stages. The road during these ten days' journey passes for the most part through a stony plain, and every person is constantly occupied in looking to the shoes of the horses, and in keeping the animals shod. Throughout the whole of the distance there is very little jungle, and wood is very scarce. There is found in some parts a species of shrub called burchah, the roots of which are torn up and used for fuel, whether wet or dry: continual search is made for this product.

This is the great road to Yarkand, and travellers generally pursue this route when there are no inundations, especially in the winter season; but in the summer time, when the waters overflow, they pursue a different route through the Nobra country.

Providing themselves with a sufficient number of stout men and horses, they set out from Ladakh towards the north, and pass over some high mountains, called Kardong (كردونگ). Their baggage is conveyed over these mountains by yaks, belonging to carriers hired in the city. The first night they reach a place called Kunâlas (كنعلس), and on the second day, having effected the passage over the mountains, they reach the village of Kardong. Three stages

from hence they enter the Nobra country, the villages and cultivation of which, and the fruits, apricots, water, and air, are all superior to those of Ladakh.

After two days' journey, a village named Hindál (هندال) is reached, near to which there is a great road leading to Iskárdú. Having rested here from the fatigues of the journey, and having proceeded two stages farther, the traveller reaches the mountains of Karáwal dawán (قراول دوان). These mountains attain a very considerable altitude, and travellers about to cross over them start before break of day. After encountering numberless difficulties, and enduring great fatigue, they effect the passage ere night sets in. It is customary here, whenever a caravan arrives from Yarkand, that, for the purpose of assisting the merchants, one or two men of Nobra go out upon the mountains, and kindle as many large fires as there are merchants in the caravan. Notwithstanding the distance of five or six stages between this place and Ladakh, the fires are descried from the residence of the raja, which is situated on an eminence. Carriers are then sent out to meet the merchants, and to assist them on the road.

After crossing the mountains of Karáwal dawán, the road for two stages lies through a mountainous country, in which no wood can be procured except the burchah¹. The river Sasír, which rises near the Muzdúrán, or Icy Mountains, is sometimes very much swollen, and flows with a very rapid and turbulent course; heavy clouds also gather round: on such occasions travellers wait upon the banks, and as the source of the river is very near at hand, the waters gradually subside, and the travellers pass over securely. Two stages after crossing this river, the road unites with the great route to Yarkánd, near Karah karam.

From the village of Akhkám to the village of Karah karam the ground passed over by the great road gradually rises. The mountains at the latter place are not very high or steep, but their elevation at the base is very considerable. In winter the atmosphere at this place is exceedingly impure—so much so, that from its influence, and the scarcity of water, strong well-conditioned horses will fall down suddenly and die. The carriers also suffer from it, but its effect upon the human constitution is not so rapid, and some experience no ill effects from its influence. As a means of averting the effects of the noxious air, it is usual during these two stages to abstain from flesh and butter; and, indeed, the taste becomes so vitiated that bitter or sour food is

¹ Here written "parchah."

preferred. For three or four stages on both sides of Karah karam the country is entirely destitute of wood—there is not even any of the burchah to be found; it is consequently necessary to carry the fuel required for these two or three days on horses. In winter, when the frost prevails, there is also a great scarcity of water, and horses frequently fall, and die of thirst.

From Karah karam to Kazil tágh (قزیل تاغ), or the Red Mountain, and from thence to Ak tágh, (اق تاغ) is a stage. A place called Malik Sháh (ملك شاه) is next reached; there is a spring of water here, and fodder is procurable; so that food and drink can be given to the horses, and travellers are relieved from the fear of losing them by death. From hence to Kirghiz jangal, which contains abundance of wood, the road passes through a valley, which is in some parts wide in extent, and in others more confined by the hills; the mountains, however, are never very distant. Travelling onwards till night a place called Kalan uldi (قلن الدي) is reached, where there is plenty of wood, fodder, and water. In this stage there is a road leading to Sarikul (سَرِقْدَل), by which the Kirghiz Tatars have approached, since ten or twenty years past, on plundering expeditions, causing great alarm to caravans as they pass along: the road was formerly secure from these attacks. When the baggage horses die through the impurity of the atmosphere in the vicinity of Karah karam, the merchants leave their loads by the side of the road, and go on contentedly to Yarkand. When they arrive there, they send out men and horses, who bring in the property. It is only at this part that travellers are thus obliged to abandon their baggage, for in other places some means of transport are found, and they continue their journey.

Having left Kalan uldi, travellers next reach Yangi dawán (ينكي دوان), or the New Mountain; and continuing onwards for two or three stages through a mountainous country, well supplied with grass and fodder, arrive at the tomb of Saiyad Jalál ud dín; but they often go on beyond this place before making a halt. For the distance of two stages onwards the road proceeds through a narrow valley, in the midst of which flows a river. The baggage is generally carried through the river by the horses, which is a work of some difficulty; and when the waters are high, the goods sometimes get wetted. This river is crossed several times in the course of the next two days' journey.

Khalastán (خَلَسْتَان), which is the next stage, is a village

situated on the banks of the river, and surrounded with plenty of jungle. There are some Wákhánís living in the hills near this place, who are the only people of that race in the confines of Yarkand. Travellers with the caravans, when they arrive here, go to these Wákhánís, and procure from them sheep, butter, milk, curds, grain, &c., and for this purpose they sometimes remain there one or two days.

From this place the road proceeds to the mountain called Topah dawán (توپہ دوار), or Mountain of Earth, which consists merely of dirt. Travellers passing over it keep carefully to the beaten road, for the dirt moves about like a stream of water. Starting from hence and travelling till night, the traveller reaches Kokiár (کوکیار), which is the first inhabited place of Yarkand. A Chinese customs officer and guard are stationed here. It has long been the practice at this place that the Chinese porters carry all the packages and miscellaneous articles of the merchants to the custom-house as soon as they arrive, and there secure them. On the next day a small piece of paper, with writing upon it, is stuck upon the outside of the closed bags or packages, near the opening, instead of a seal. An account is then drawn out in the name of the traveller, and a catalogue is made of all the miscellaneous articles; the goods are then given over to the owners. On the second day two horsemen are sent on with the caravan to Yarkand, and in three days they arrive at the city, when the goods are deposited in the custom-house, according to the account sent with them. Here, according to old established custom, they levy at the rate of 40 per cent. from traders of Hindustan and Kashmir, and at the rate of 30 per cent. from those of Bokhára, Andaján, Badakshán, and other places. Jewels and precious stones were formerly allowed to pass without notice, but for some years past, in consequence of the disturbances in Kokán, these are delivered up to the customs officers of the Chinese Emperor. They convey them on to the city, according to established practice, and deliver them over to the hákim, and he afterwards restores them, packed up, to the owners.

RULES OF THE GOVERNMENT OF THE EMPEROR OF CHINA.

The Emperor of China appoints the governor of the city, who is a Chinese, and is called Ambán. Troops are placed under his command, who are supported by monthly pay, and whom he employs in the affairs of government, and in watching the treasury and gates of the city. The customs, tribute, and the grain of the Khániyah or state

lands, are committed to his charge. The government grain is brought into the granaries every year by the labourers of the hakim; and the different kinds of grain are then changed for wheat, which is the only grain stored in the public granaries. Whenever the grain is damaged or injured, it is immediately sold in the markets at a low price, and good sound wheat bought in its stead; whatever loss is sustained in the transaction is borne by the government.

The government also appoints a Mussulman governor or magistrate, called Hakim, distinct from the Ambán. The administration of justice in the city, the collection of the customs, tribute, and government grain, and the keeping of the registers, or accounts of the city, are the duties of the Ambán. There is no interference of any kind with the religion of the Mahomedans. The Kazi of the city holds a very high station, and his orders are treated with the greatest respect. The Ulamas, or learned Mahomedans, are treated with much honour and regard. Whenever a dispute arises between a Mahomedan and a Chinese, it is settled according to the Mahomedan law. The Chinese also are sent to the Hakim, and he, with common consent, settles their disputes by Mahomedan law. The law is very rigidly administered, even to the nobles; so much so, that if a prince were to kill a poor man, the murderer would on no account be exempted from the punishment of death. Criminals are seldom imprisoned, but the punishment usually inflicted is of the following kind. A collar of wood, about a guz square, divided into two halves, made to open and shut, and having a hole through the centre, of the size of a man's neck, is fastened round the neck of the criminal; and he is compelled to wear it for two, three, or six months, according to the nature of his crime. Those sentenced to this punishment are frequently stationed in the bazars, so that they may serve as a warning to others. At different parts of the bazars there are holes dug, for the purpose of enabling the persons wearing the collars to sit down and rest. When they feel tired or sleepy, they get into these holes, and rest the collar on the surface of the ground; and in this position they rest and sleep. In other places in the bazars seats are built up, and men may daily be seen sitting in them. Quarrels are of frequent occurrence in the bazars, but no notice is taken of abusive language; if, however, blows are given, either with the hand or weapons, the person who struck the first blow is seized, and, under the orders of the Hakim, he is subjected to the punishment of the collar; because all men are considered equal before the Hakim, and the right of inflicting blows or imprisonment belongs to him alone. Corporal punishment is inflicted with a stout stick, about a palm in width, shaved flat, and having a handle

at one end. The criminal is thrown down upon his belly, and two men hold him firmly by his head and feet: a prescribed number of blows, according to the nature of the offence, is then inflicted. Women and armed men are not allowed to leave their native country. There are two tribes or classes of people in China, the Kara Khatais (black Chinese), and the Manchus. The emperor is of the Manchu race; consequently, whenever a Manchu is sentenced to corporal punishment in any city of China, a carpet is spread upon the ground, on which he is thrown down and beaten. The Kara Khatais are beaten in the ordinary manner. On the first three days of each month the troops are exercised, and the pay is then distributed. A fourth part of each man's pay is deducted, and retained by the Ambán as a deposit: whenever the soldier is removed, or goes away, the Ambán renders an account of it, and pays it over. The troops are not allowed to retain their muskets and swords except on drill days. The officers and soldiers, whether abroad or at home, do not cook their own food: in towns there are markets where it is bought; and in camps a bazar is established for every thousand men.

At the beginning of every month the Ambán, the Hakim, the nobles, and all the officers in the pay of the government, go early in the morning to the temple, and prostrate themselves. On the walls, in the interior of the temple, there is a large painting, representing the council of the King, with his ministers and nobles, to which they bow down. The Hakim also goes occasionally to pay his respects to the Ambán, especially when any important affair happens in the city. The shopkeepers, artisans, and cotton-weavers of the city, as also weavers in the country, are exempt from tax and tribute; and from the shops and lands of the city nothing is regularly levied. The artisans, however, are compelled to work at stated periods for the government; but instead of exacting this daily labour, the value of it is settled, and collected from them. A poll-tax, called Albán, amounting to ten or fifteen rupees, is collected from the ryots, excepting religious and learned men, for defraying the expences of the officers employed in the ortang¹, or post-office, and the charges of its transit.

The cultivated lands in the villages are of two kinds; one called khániyab lands, of which half of the produce is regularly taken by the government. Whenever the Hakim bestows any of these lands in jaghir to learned or religious men, no tribute is taken. From those

¹ "Ortang"—a custom-house, or station where tolls are levied. It would seem from the text that the officers of these stations are charged with the transmission of the post.

who hold the *zar kharid*, or purchased lands, 10 per cent. is regularly collected. The collection of the land revenue is under the exclusive control of the *Hakim*; and the *Ambán* has no right of interference, either in collecting or remitting.

COINS.

The coins of China are square, and are made of copper or brass; and have a square hole made through the centre. They are struck in the chief cities. On one side there is a legend, in the Chinese language and character, and, on the other, the name of the city where the coin is struck; as, for instance, that of *Pechin*², which is the name of the capital, and seat of government of the Emperor. In *Pechin* they are made of brass, and are current throughout the empire. In other cities they are made of copper. The *fulús*, or small coins, are called *pal*; fifty of them make a *tanga*, which is about equal to a rupee. In trading transactions, the money is paid in *tangas*, which are strung upon a cord about three spans long. If twenty *tangas* are to be paid, two strings are given; if a hundred, five; and so on, the traders confidently receiving the strings without troubling themselves to count the coins. There are no gold or silver coins in the country; but pure silver is made up into lumps of the weight of fifty *pals*, called *yambo*, some of which have marks and letters stamped upon them. The halves and quarters of the *yambo*, and even so low as the proportion of a single *pal*, are made, and pass current in trade. Pieces of silver also, not forming parts of a *yambo*, pass current simply by weight.

In the city of *Kokan* gold, silver, and copper coins are struck: one gold coin is equal to twenty-two *tangas* of silver; and the silver *tanga* to forty small *fulús* made of copper. These coins are all generally current.

¹ This is the Tatar pronunciation of *Pekin*. In the northern parts of China the *k* is generally softened into *ch*.—*Morrison's Dictionary*.

ART. IX.—*Replies to Queries in relation to China, Proposed*
by SIR G. T. STAUNTON, BART., M.P., *in the year* 1846.
By DR. C. GUTZLAFF.

[*Read January 16th, 1847.*]

1. What are the geographical features and geological characters of your district?

THE ports with which I am most acquainted are, Hong-Kong, Chusan, and Ningpo.

Hong-Kong and the adjacent district of Singan consists of red earth mixed up with gravel and disintegrated granite, interspersed with large masses of granite. The fertile parts are formed by deposits of alluvial soil in the valleys, of which there are many on the shore opposite Hong-Kong, between ridges of mountains stretching along the whole coast.—Chusan has a loamy soil, the hills being covered nearly to the top with black earth, and is with very few exceptions productive. Sandstone is found in the north-western parts of the island, but not in any large quantity. The writer has never seen any volcanic remains, as some English residents on the spot are said to have found, thereby suggesting the idea that this group is a continuation of the Japan Islands.—The soil around Ningpo is still more fertile than that of Chusan, the environs forming a very extensive valley, with mountains at a considerable distance. The whole is well watered, both by nature and art, and it presents the most delightful views, and one aspect of teeming fertility.

2. What are its chief productions and manufactures?

Hong-Kong does not produce sufficient rice for the consumption of its original inhabitants, nor vegetables in any quantity. There are, however, considerable fisheries; no less than two hundred large smacks belong to Chekchu, Shihpaewan, and the fishing stations on the promontories, with large nets which catch more than is required for the consumption, affording a considerable surplus for exportation. The granite brought from the quarries, much of which is exported to Canton, maintains a great number of people; many thousands of peculs are also carried monthly to other ports.—Chusan produces no articles for British consumption, but it grows

a green tea for the home market, which is annually sent to Loochoo to the amount of about 30,000 dollars. It has very extensive fisheries in the neighbouring waters, which are resorted to by the celebrated mandarin fish, a highly prized delicacy, which is exported in ice to all parts of China, and constitutes an essential and important branch of trade. There is moreover much salt made on the coast, and though the country does not produce sufficient rice for its own consumption, it exports sweet potatoes to a very large amount.—Ningpo produces no more food than is required for home consumption; but it exports cotton, indigo, a variety of drugs, and a peculiar kind of tea, highly prized by the Chinese; a very expensive article, but not adapted for the British market. The chief native manufacture is furniture, which is unequalled in China, and is carried to very distant parts.

3. Are any of them likely to suit the British market?

I do not think that Hong-Kong would ever furnish any thing for this purpose.—Chusan, with due attention, and a sufficient capital, could no doubt supply us with raw silk and tea. The finest of its teas, when tried by a practised English taster, was pronounced equal to the best gunpowder, but ill prepared to stand a voyage.—Ningpo has at present nothing of importance to offer, and could supply England with silks and teas, as a port of transit only; but in this it has too powerful a rival in the neighbouring Shanghai. One point, however, which has been frequently overlooked, we ought to mention here. Ningpo is the residence of capitalists, who have very large transactions in bullion, extending from Canton to the frontiers of Siberia; a connexion with these money transactions would be
 • advantageous.

4. What articles of European produce and manufacture are in demand amongst the natives?

At Hong-Kong the number is very great, embracing nearly the whole catalogue of our manufactures, though less for immediate consumption than for traffic on the adjacent main. A considerable trade has thus arisen, which is carried on quietly, and almost imperceptibly to the European eye. To come to the exact amount is a matter of impossibility. The far greater consumption is that of calicoes, extensively worn by rich and poor, during the greater part of the year.

The same article is likewise much in demand in Chusan, but it is there more used to make padded jackets, for the winter, than for

summer dresses. On the adjacent continent this is still more the case, and the consumption is enormous. The woollens have there to contend with the Russian manufacture, a thick, though not very durable article, but much used on account of its cheapness. Our chintzes likewise find purchasers, because they are much cheaper and keep the colour better, than those made in the country, in imitation of the Japanese. A good many camlets, too, have found their way from hence to Japan, by means of the Chapoo junks. Watches and clocks of very inferior kind, have met with numerous purchasers. These do not pass the Custom-house, and no regular account is kept of them; the writer, however, knows from personal observation, that there is annually a considerable sale.

5. Is opium consumed by the natives; by what classes; and in what proportion to the entire population?

The consumption of opium at Hong-Kong, judging from the revenue it produces, is very considerable. The man who can pay 1560 dollars per month for farming the duties, must have a sale of at least twenty times the amount, to cover his payments. The floating and shore population of the whole island does not amount to 20,000; and if we assume that one half of the quantity imported is carried to the continent, (the largest amount that we can set down, for most places are supplied from Kamsingmoon, on account of the greater cheapness,) there still remains a very large consumption at this place. It is smoked principally by dissolute adventurers and prostitutes and their companions, and also by quarrymen, sailors, and shopkeepers.

The consumption on the whole island of Chusan is not one-fifth of that of Hong-Kong, though the country has about 260,000 inhabitants. In the villages, I have seldom seen a man smoking it; in the city, it is consumed as a luxury; and though I took the census of the whole population of Tinghae, I did not observe a single man enervated or emaciated by its consequences.—In Ningpo it is used on a far larger scale, so that from three to four opium clippers find constant employ in supplying this city and the adjacent country. Without selling at least forty chests per month at an average, such a vessel could not continue to pay its expenses. The chief smokers are soldiers and Mandarins: it is as dram-drinking with us, and no man can claim the honour of being a military character, without inhaling the fume. Next to them come the sailors, with whom opium is the highest of their pleasures. Lastly, come the richer classes, who

use it as a luxury. Its use is by no means so general as in Fokkēn; though there are numbers of miserable objects who have ruined their health by it for ever. If we may make a rough estimate, perhaps five per cent. of the whole Ningpo male population participate in this vice; the peasantry, the largest and most numerous class of the people, seldom, if ever, use it.

6. What effect has this habit upon their moral and intellectual character, as well as on their bodily health?

One general observation will hold good, and may be proved by numerous instances, that the larger the consumption of opium, the more frequent is crime of every description; and the more extensive the trade in it, the greater is the moral misery which spreads over the country. The writer has instituted the most extensive inquiries on the subject, and has found in addition to the above remark, that squalidness and haggard wretchedness increase with its use. Those who smoke excessively have their bodies covered with sores, and at last bordering on the grave, they walk about looking like gaunt skeletons. But we must not ascribe all the moral evil to the inhaling of the drug; the smokers are gregarious, and they contaminate each other; gambling is carried on in their assemblies; and the brothel is an accompaniment of their revels.

7. What is the moral, intellectual, and physical character of the natives of your district, as compared with other parts of China?

Hong-Kong had originally a very small native population, extremely poor, and living by quarrying, agriculture, fishing, and occasionally by piracy. Our arrival naturally collected a great many adventurers, vagabonds, prostitutes, and gamblers; and in fact, the scum of the adjacent islands and districts. The latter have a very vicious population, remarkable for their thieving and piratical propensities, and are desperate on account of their destitution, the territory yielding in many places but very little for their subsistence. This may account for the frequency of crime in the colony. To hinder the influx of the surplus population of the continent is impossible, and it will always be a very difficult task to suppress the innate desire of mischief which characterises the islanders.

Chusan has an entire agricultural population attached to the soil, possessing a sufficiency, and having so much to do, that all hands are fully employed. The whole population consists of quiet and orderly people, and vagabonds have little chance of succeeding in their

iniquity, because they are hunted down everywhere. The following fact is an instance of this. Some very bad characters, being some of the outlaws whom the Chinese government had employed to kidnap our soldiers, had infested several parts of the shore; they were warned off, and although they treated the threats of the populace with scorn, as they could find no hiding-place they were compelled to decamp; a few months afterwards they reappeared, and forthwith began their depredations. On a sudden the popular indignation arose, these ruffians were put on board a boat, stones were tied round their necks, and they were all thrown into the sea and drowned; the persons who did this could never afterwards be found out. The writer was police magistrate on the island for a considerable time, and the whole amount of crime after order was introduced into the chaos, was, on an average, about two or three cases per month, amongst a population of 260,000, and these for pilfering or petty fraud.

The population of Ningpo bears an equally good character: at the worst period of our occupation, crime did not bear any proportion to what was the case at Hong-Kong, though the jurisdiction extended also over the towns of Funghwa, Szeke, and Yuyaou, in addition to Ningpo. I had at that time the management of all the judicial proceedings, and I can bear testimony that not one-third of the criminal cases which now occur at Hong-Kong took place in the former district, with a proportionate population of nearly seventy to one. The explanation of this extraordinary phenomenon must be sought in the higher moral qualities, the steady mode of life, and the superiority of that race of people all together. The intellectual character here in Kwangtung province appears to be superior to that of Chêkeang. The number of people that can read and write is much more considerable than there or in Keangsoo. But in physical and moral character, the people to the north are far superior to those of the south.

8. Are robberies and thefts frequent?

At Hong-Kong very much so, notwithstanding the large police force: few places in the world show a more fearful criminal calendar. In Chusan robberies are unknown, but suicides frequent, especially among women. Daring robberies in broad day-light are at Ningpo a common occurrence, and frequently in defiance of the whole Mandarin force.

9. Are murders and piracy frequent?

At Hong-Kong, considering the small population, murder may be said to be not rare. At Chusan, no case as far as I remember

occurred, except the one cited above. In Ningpo it is seldom heard of; piracy is frequent in these waters, as well as throughout the whole Chusan group, and in fact all along the Chinese coast. There never was a time, when the seas from the island of Hainan to Chihle were more insecure. To cite recent instances of piracy would be to write a book.

10. Is infanticide prevalent?

Chiefly in Fokëen, on account of the large emigration of the male population. The great disproportion between the sexes in Chusan, and the occurrences that have come to the notice of the writer when at that island, as well as at Ningpo, leave in his mind no doubt of its frequency, though no data can be given, on account of the secrecy with which such deeds of darkness are perpetrated. In Hong-Kong there are too few mothers to furnish a criterion.

11. Is the population generally, favourable to Europeans, and to European Commerce?

The people of Ningpo and Chusan are decidedly so. The Canton district forms an exception to all other parts, in hostile feelings towards foreigners.

12. Is the trade carried on by barter, or is credit frequently given:— and if so, to what extent; and what is the result?

Opium is generally paid for in ready money, though very recently a great deal of trade has been carried on by barter even in this commodity at Shanghai. But the system of exchanging goods for goods becomes more and more general everywhere, on account of the scarcity of bullion. Credit is given to a very small amount. Since the large failures at Shanghai, which took place last year, I believe no reliance whatever can be placed upon the common Chinese trader.

13. Is there any social intercourse between foreigners and natives?

To a very limited extent, for the races are too much estranged from each other by habits, language, and religion, to delight in each other's society. Several missionaries, however, at Amoy and Ningpo, have very much ingratiated themselves with the Chinese, and have met with much kindness in return.

14. Are foreigners confined within certain limits by the established regulations: and if so, do they practically submit to those regulations, or do they occasionally penetrate into the Interior, and what is the consequence, when they do so?

Yes, they are, to the great injury and confinement of the trade. As most foreigners are, however, men deeply immersed in business, they trouble themselves little about the country. Many instances occur of foreigners penetrating far into the country, not only Catholic missionaries, but also scientific men and merchants. This is done however very quietly, and in a Chinese costume. When discovered, our consuls have fined the transgressors, or the Chinese Government has sent them back to Canton, as was the case a fortnight ago with two French priests who had entered Mongolia. Most attempts, however, succeed, and no further notice is taken of them.

15. Are the natives, generally speaking, obedient to the government, or are insurrections frequent?

The weakness of the Mandarins has been shown so glaringly during the war, that many insurrections have taken place in almost every province. Respect to their rulers is entirely lost, and with it obedience; and this state of things is rendered worse by the want of physical strength in the government, which has dwindled down to almost nothing.

16. How are the people affected to the reigning Tartar dynasty?

The great bulk of the natives in the southern provinces scarcely ever inquire who are the rulers. The principal opposition is found amongst literati, philosophers, and bigoted Chinese, who can never forget that they are subject to Barbarians. Their influence, however, is not strong enough to excite the public opinion against the Manchos.

17. How are the laws administered in case of differences between foreigners? between foreigners and natives?—and in cases in which natives only are concerned?

In the first case by our consuls, according to certain rules. In all indifferent cases the consuls also settle disputes between foreigners and natives. Appeals against the latter to their Mandarins, by foreigners, are seldom listened to, and if attended to, redress cannot be easily procured. The will of the Mandarin, clothed in the language of the law, is mostly throughout China the basis of jurisdiction. I Hong-Kong, in every case, even of life and death, the law is solely administered by British officers.

18. Is the law, in general, purely administered in the native tribunals, or does corruption prevail, and to what extent?

The law is in reality a mere crochets, but justice exists in China theoretically as perfectly as anywhere in the world; the execution, however, is guided by self-interest, and corruption is so general that it scarcely produces a remark. The highest degree of skill in a lawyer is how to circumvent, the sole object of the legal officer how to realize most money; exceptions from this general rule are indeed very rare.

19. How are causes conducted in Chinese Courts—have they any persons employed as counsel, attorneys, for the plaintiffs and defendants?

The relations or friends of a criminal have full liberty, either themselves in person to present memorials through the clerks of the office, or to employ attorneys, and speakers, a particular set of pleading barristers, to contradict the accusations as much as they choose. All evidence they may bring forward is also listened to; when, however, the actual trial takes place, the prisoner is solely at the mercy of the Mandarin, who pronounces his sentence unshackled by any guide but his own will, and clothes it in legal language, citing chapter and verse of the code. Appeal to a higher court is perfectly legal, though every step taken involves heavy expenses, and the meanest individual may carry his case to the Court of Requests at Peking. The proceedings in the Court itself are very summary; the accused appears, a few questions are put to him, and he is instantly sentenced, without much reference to his answers. If he has committed a capital crime, the authority for executing a certain number of men is before-hand obtained; whatever has been written or stated for and against the culprit is read; one or two inquiries are made in the presence of the highest authority of the province, and the prisoner is forthwith sent to execution. In an hour afterwards the headsman appears, reporting that his work is done. If any one subsequently can prove that the supposed malefactor was innocent, he may do so, and the sentence in that case is revised. The jurisprudence of China will be explained by a recent instance. Some men had been taken up at the mouth of the Yangtze as pirates; they were very miserable wretches, and the suspicion against them was strong and well founded. Evidence, however, being wanted, their shin bones were beaten until they were broken, to prevent their running away. Their wrists were loaded with heavy chains, which destroyed their flesh to the

very bones, the maggots got into the wounds, mortification ensued, and they died in consequence. The object was thus obtained without a legal prosecution, but the relations of the culprits had full liberty to prove and establish subsequently their innocence. Many criminals, who cannot be condemned according to the letter of the law, die thus chained to a plank, in prison, in the utmost misery, to remove at once all legal difficulties.

20. Are there any very large proprietors of estates, or is the land very equally divided?

At Hong-Kong there was a nominal proprietor of the greater part of the soil, who had received some grant of it, when still in an uncultivated state, but who exercised no kind of ownership over it, except the privilege of raising the land-tax for government, and receiving some surplus on account of his being security to the Mandarins for the payment of the same. The land itself there is divided amongst a number of small proprietors, the majority of whom do not possess much above an English acre, on which however a family can well subsist. In Chusan it is quite different; there are in the city, and in every large village, some great proprietors to whom the major part of the land pertains; the richest amongst the number, in the most prosperous years, had an income of nearly 20,000 dollars, the generality not more than 12,000, with a large number of retainers to maintain. The same observation is applicable to the environs of Ningpo, where many rich proprietors reside. Land is considered the best and safest property for investing money, returning at an average five per cent. The principle which I found prevailing in every place I visited is, that the farmer should pay one-half of the net produce of the soil to the owner. For this purpose, the grain was thrashed on the very spot where it had grown, and put into two scales, so that there could not be the least doubt as to equality of shares, and carried away immediately by the proprietor and the farmer. The farmer pays, however, the duties to government, which amount in regular fees to one shilling per Chinese acre, (of which about $6\frac{1}{2}$ constitute one English).

21. Are there any ancient families recognised and respected in the district?

In Hong-Kong I could not discover any such family; but in Chusan, as well as in other districts, the respect shown towards them is carried to a great extent, and the very name is sufficient

to inspire veneration. These families from their position, have often a far greater influence upon the population than the Mandarins; wealth, however, or literary fame, are likewise requisite to continue their claim to respectability. They keep up their celebrity by genealogies, and a pedigree written in gold letters on black. These often ascend to very high antiquity, to ages far more remote than the most ancient nobility of Europe can boast. Government, however, does not acknowledge any such pretension, and merely recognises the titles bestowed by itself as claiming esteem.

22. Is there any special provision for the destitute poor, or if not, how are they relieved and supported?

There are poorhouses on a very limited scale in all cities; the difficulty however is, how the pauper is to share in the charity, as a right to it can only be obtained by the payment of a considerable sum, and strong interest. But the general poor law everywhere acknowledged, may be expressed in these terms:—if you cannot live, die, and we will bury your body. By this heartless or rather fiendish principle, the country is always relieved from mendicants through starvation, as not one-hundredth part of them can obtain access to the institutions for their relief. The vicious part of society is removed from this world, by the same process, so soon as the votaries of pleasure are penniless or destitute. The number of human beings thus dying from want in times of general plenty is very great, amounting to myriads every year, and in large cities a place is allotted to them, whither they may go, lay down their heads, and die of hunger. The provisions for the blind are made with great care, and a due consideration of their wants, evincing much national interest in these unfortunate beings.

23. Is mendicancy very prevalent?

It is in most places to a very large extent, and in order to carry on begging on a systematic plan, the indigent form themselves into societies with a head man, who guides their motions, and enforces their demands. Beggars make regular tours through the country, claiming as their right one cash on application. Begging is considered as good a profession as that of a mendicant friar, and is carried on everywhere throughout the whole of China. Every one however who wishes to practise, must first be received into the fraternity, otherwise he would soon be compelled to abandon his vocation. The fraternity itself has its fees, regulations, and overseers, and is on the whole organised with great skill.

24. What is the condition of the people as to education:—can any considerable portion of them read and write?

The colonists at Hong-Kong, and the inhabitants of all the environs, have in every corner and hamlet a school, and there are very few males who cannot, more or less perfectly, read. Investigations have been expressly instituted in several villages, and have always gone to prove, that an utter ignorance of the written character cannot be attributed to many individuals. The whole system of education however, from the highest to the lowest, is confined to reading and writing, as the summit of human acquirements.

In Chusan and Ningpo the case is very different. Readers are there fewer in number, scholars still less frequent. Even the graduates do not come up to the proficiency of a first-rate boy in a Kwangtung school. The cause must be sought in the smaller number of schools and in the incapacity of the instructors.

25. Is the population supposed to be on the increase, or the contrary?

At Victoria decidedly on the increase on account of immigrations, but not by births, which are very rare, because few married women live on the island. I may say, that the average of births in Chusan, was not under twenty per cent. In Ningpo, I could make no observations to settle this point. The most intelligent Chinese with whom I have conversed upon the subject, and amongst them statesmen of some renown, asserted that the population increased rapidly, without the least check, and this they proved from the increase of cultivation, which advances every year, and from the immense extension of the people in every direction. To this opinion I fully subscribe, and a decisive proof is, that districts where thirty years ago not a human being was found, are now full of villages and hamlets. When making the census of Tinghae, only one unmarried female of mature age was found amongst 30,000 inhabitants, and she was an English lady. Nor did I discover a single bachelor except men in the utmost distress; nor amongst 100 families more than one without children: the average of the whole, however, gave only five individuals to each. In my humble opinion, the Chinese nation possesses an innate power of increasing and multiplying such as no other people has. If at this moment a colony of 10,000 healthy males and females were sent to California, as colonists, they would in eighty years cover the whole peninsula. Wherever Chinese men and

women have settled, they have increased beyond all calculation, and Mongolia, Manchuria, and Tibet swarm, at the present moment, with the Celestial race.

26. Is the district supposed to be, generally, increasing in wealth and prosperity, or the contrary?

Hong-Kong decidedly is, though by no means at a rapid rate, and this dilatory progress may be ascribed to the frequent changes in colonial commerce and the absence of native trade. Chusan was during our rule in the most flourishing condition; it is, however, much to be apprehended, that there will be now a retrograde movement. Ningpo is to all appearance stationary.

27. What is the prevalent religion or superstition in the district?

In Hong-Kong only few temples exist, and these are dedicated to some idol of Buddhism; there is only one priest ordinarily residing there, and he is a mendicant friar. In Chusan Buddhism likewise prevails, and each valley has its temple; but religion is at a very low ebb, and still more so at present than ever before. Much reliance was placed at the commencement of the war upon the idols. None, however, appearing to the assistance of the Chinese army, and their shrines being desecrated without the gods taking vengeance for their wounded dignity, the popular belief in idolatry has been turned into scepticism. A great many householders at Tinghae have of their own accord entirely discarded the images from their dwellings. Ningpo has large establishments for the Taouists, a mosque, and numerous Buddhist temples; but there also superstition is on the wane. The celebrated establishment of the Buddhists at Pooto is verging to ruin.

28. What are their favourite games and amusements?

Games of chance of every description, amongst which the dice figures most, form an absorbing amusement for old and young. As a general observation we may state, that no Chinaman can live without gambling. The most moral man abstains until the new year, and then gives way to the passion, which has all been suppressed since the last new year. Playing cards principally for pleasure, draughts, and more rarely chess, is common among all classes; the females, however, do not appear to participate in these amusements. Amongst other favourite pastimes, is the flying of kites in autumn, in which even old men delight. Theatrical exhibitions may

be met with in every city of the land. As access to them is free, people of all descriptions crowd to them, especially in the evening. In Ningpo the plays are represented with considerable splendour. Feasting, with a variety of noisy entertainments, frequently takes place. For more refined enjoyments the Chinese possess neither faculties nor organs. .

29. Are there any ancient monuments, or antiquities of any kind to be met with?

Hong-Kong has none. In Chusan there is a temple, with immense statues of Buddha, and also a representation in bas-relief to give an idea of the deluge, which is very striking. There is, moreover, a stone pencil and gigantic inkstone, resembling a pond. The granite dykes on the north side of the island, resembling raised walls, are speaking monuments of Chinese persevering industry. In Ningpo, the pagoda erected in the time of Charlemagne, when the former was already a large and flourishing city, is well worthy of attention. Amongst the temples, the one dedicated to the god of fire is of ancient date. Besides walls and pagodas we find scarcely any monument, because buildings are here erected of too perishable materials, and every trace of them, after their dilapidation, instantly disappears. No greater proof of this can be found than in the environs of Nanking, where in times of yore throughout the park, stately palaces were erected, and the only remains now are a few mutilated granite statues, standing at the graves of departed princes.

30. In what language are commercial transactions with foreigners generally carried on :—in pure Chinese ; in pure English ; or, as in Canton, in a jargon partaking of both ?

In the south invariably in an Anglo-Chinese jargon. In Chusan the natives acquired English, and speak it much better than the Canton men. I am not aware that any commercial house carries on business in the Chinese language.

31. Have the Christian Missionaries, Roman Catholic, or Protestant, met with any success in your district, and are the works which they have printed and endeavoured to circulate, in any esteem amongst the natives ?

The Roman Catholic missionaries state, that at no previous period were so many converts made as at present. Protestantism is gaining ground in all the ports open to our trade. In Chusan

there were two Catholic churches, and two Protestant meeting-houses. In Ningpo, the former are now building a church; the latter have printing establishments and dispensaries, as well as a chapel. In Hong-Kong there are chapels and meeting-houses of both persuasions, and a number of converts belonging to the latter. These have likewise a hospital. There are also some of each at Canton. A good number of Protestant Christian Chinese have, of their own accord, commenced propagating the Gospel in the interior, and been successful in establishing churches. But all these operations together, when the object to be accomplished is considered, are as a drop in the ocean. Latterly a few books have been sold, a bookseller has also promised to publish the Chinese New Testament on his own account,—the books gratuitously distributed always find readers; but no longer after Christian and western literature has yet been evinced on a large scale.

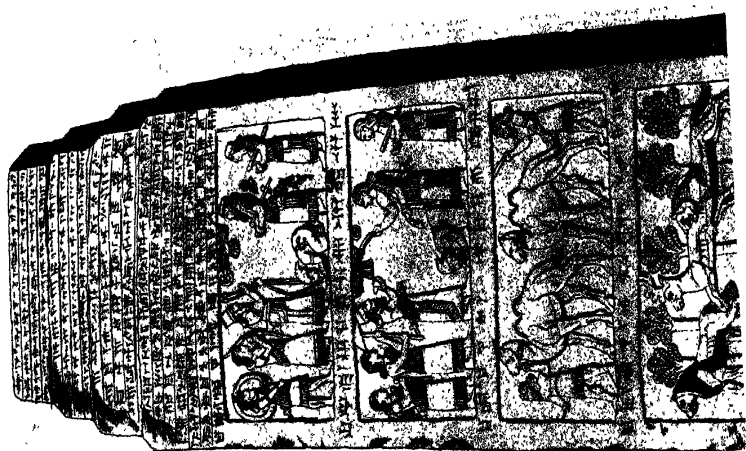
32. Do they meet with any obstruction from the government, and do the priests of the prevailing superstitions evince any jealousy respecting them?

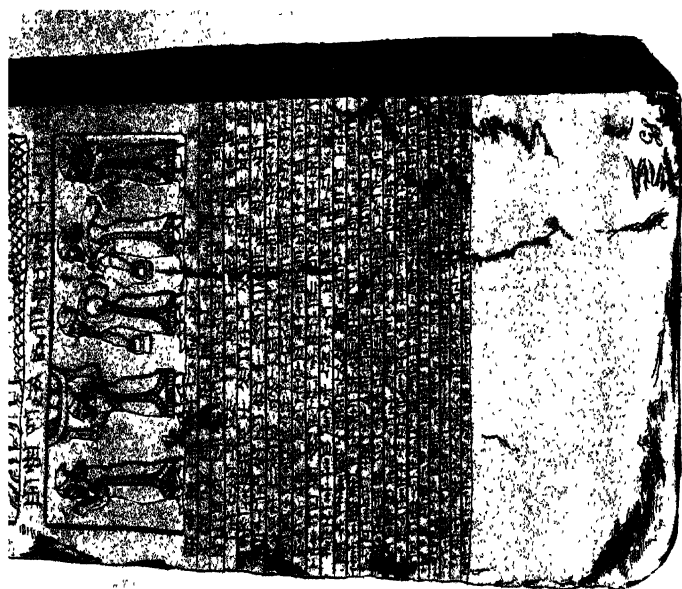
Since the peace no instance has come to my notice, nor do I remember a single priest who stood forward in defence of his religion. An English missionary told me, that some time ago at Canton, a Bonzo with some low fellows endeavoured to burn the house, in which he was living, over his head.

33. Has the increased intercourse with foreigners since the peace made any perceptible alterations in the habits or usages of the people, or has it led to the adoption of any of the improvements and inventions of modern science; and, in general, has it conducted to more liberal views respecting the conduct and character of foreign nations, amongst the natives, either in the higher or lower classes?

In Canton the hatred has become more inveterate; in the other ports there is the best understanding between both parties; but nowhere, I believe, have any improvements been adopted from foreigners. It is true, that the government have built ships according to our models, but they are but junks in reality; and their management is very imperfect. Our cannons, shells, &c., have also been imitated, so as to look like our own, but they are of the same porous and useless substance as in the olden times. Science has gained nothing, though there is a very powerful party who are its

advocates, whilst the mass of the ruled and rulers show apathy, and would oppose every attempt to introduce improvements. Nevertheless, it cannot be doubted, that the views of all classes have become more liberal, and the human mind is gradually disenthralled from antinational prejudice; but not yet sufficiently to produce practical results.





6. Schief.

E. Petrus imp.

Manuscript in the British Museum.

ART. X.—On the Inscriptions of Assyria and Babylonia.
By MAJOR H. C. RAWLINSON

PRELIMINARY NOTICE.

WHEN I drew up the following Notes upon the Inscriptions of Babylonia and Assyria, and read them at the Royal Asiatic Society's Meetings of January 19th, and February 16th, I had no intention of publishing them in their present form. I merely wished, as much interest had been excited by the exhibition of the Nineveh marbles, to satisfy public curiosity, by presenting at once, and in a popular shape, a general view of the results at which I had arrived in my labours on the Inscriptions; and I judged that this object would be more conveniently attained by oral communication than by publication in the pages of a Scientific Journal. At the same time, of course, I proposed to follow up the oral communication, by publishing with the least practicable delay, a full exposition of the machinery which I had employed both for deciphering and rendering intelligible the Inscriptions, and during the interval which would thus elapse between announcement and proof, I trusted that, if inquiry were not altogether suspended, philologists and palæographers would, at any rate, refrain from pronouncing upon the validity of my system of interpretation.

It has since, however, been suggested to me, that much inconvenience may arise from this partition of the subject. Weeks, perhaps months, will be required to carry through the press the Memoir in its complete state, and with all its typographical illustrations; and if, accordingly, upon the date of the appearance of the Memoir in print were made to depend the originality of the matter contained in it, my claim to a priority of, or even to independent, discovery might be very seriously endangered; for many inquirers are known to be already in the field, and the clue afforded to the rectification of phonetic values by the numerous readings which I have given in my Lectures of proper names, both historical and geographical, might thus lead to

the announcement in other quarters of the same results, in anticipation of the publication of my own translations. Without wishing then to impute any spirit of unfairness to the parties with whom I am competing, with every disposition indeed to unite cordially with them in disentangling the very intricate questions upon which we are engaged, I now think it advisable, for the due authentication of my own researches, to place on record the various discoveries, philological, historical, and geographical, in connection with the Inscriptions of Assyria and Babylonia, which I announced to the Royal Asiatic Society upon January 19th, and February 16th of the present year; and I venture accordingly, notwithstanding their popular character, to print the Lectures delivered on those occasions; merely transposing the arrangement of the materials so as to form a continuous sketch, and appending, in a series of notes, such illustrations as appear indispensable to a proper intelligence of the subject.

H. C. R.

March 1, 1850.

Notes on the Inscriptions of Assyria and Babylonia; read at the Royal Asiatic Society's Meetings of 19th January and 16th February, 1850.

BEFORE undertaking the investigation of the obscure subject of Assyrian history, I propose to explain briefly the means by which the Inscriptions of Nineveh and Babylon have been rendered legible, and to take a cursory view of the nature and structure of the alphabet employed in them. It will also, I think, be desirable to notice such characteristics of grammar and of speech, as shall be sufficient to satisfy philologers, that there are ample grounds for classing the ancient vernacular dialects of the Tigris and the Euphrates with that family of languages that we are accustomed to term Semitic, and which will perhaps further show, that the connection of the Assyrian and Babylonian is almost as close with the African, as with the Asiatic branch of the so-called Semitic family.

I commence with an explanation of the process of decipherment. There are found in many parts of Persia, either graven on the native rock, as at Hamadan, at Van, and Behistun, or sculptured on the







walls of the ancient palaces, as at Persepolis and Pasargadæ, Cuneiform Inscriptions which record the glories of the House of Achæmenes. These Inscriptions are, in almost every instance, trilingual and trilateral. They are engraved in three different languages, and each language has its peculiar alphabet; the alphabets, indeed, varying from each other, not merely in the characters being formed by a different assortment of the elemental signs which we are accustomed to term the arrow-head and wedge, but in their whole phonetic structure and organization. The object, of course, of engraving the records in three different languages was to render them generally intelligible. Precisely, indeed, as at the present day, a Governor of Baghdad, who wished to publish an edict for general information, would be obliged to employ three languages, the Persian, Turkish, and Arabic; so in the time of Cyrus and Darius, when the ethnographical constitution of the empire was subject to the same general division, was it necessary to address the population in the three different languages from which have sprung the modern Persian, Turkish, and Arabic, or at any rate in the three languages which represented at the time those three great lingual families. To this fashion, then, or necessity of triple publication, are we indebted for our knowledge of the Assyrian Inscriptions. I need not describe the steps by which the Persian Cuneiform Alphabet was first deciphered and the language was subsequently brought to light, for full details have been already published in the Society's Journal; but I may notice as an illustration of the great success which has attended the efforts of myself and other students in this preliminary branch of the inquiry, that there are probably not more than twenty words in the whole range of the Persian Cuneiform records, upon the meaning, grammatical condition, or etymology of which, any doubt or difference of opinion can be said at present to exist.










As the Greek translation, then, on the Rosetta Stone first led the way to the decipherment of the hieroglyphic writing of Egypt, so have the Persian texts of the trilingual Cuneiform tablets served as a stepping stone to the intelligence of the Assyrian and Babylonian Inscriptions. The tablets of Behistun, of Nakhsh-i-Rustam, and Persepolis, have in the first place furnished a list of more than eighty proper names, of which the true pronunciation is fixed by their Persian orthography, and of which we have also the Babylonian equivalents. A careful comparison of these duplicate forms of writing the same name, and a due appreciation of the phonetic distinctions peculiar to the two languages, have then supplied the means of determining with more or less of certainty, the value of about one hundred Babylonian

characters, and a very excellent basis has been thus determined for a complete arrangement of the Alphabet. The next step has been to collate Inscriptions, and to ascertain or infer from the variant orthographies of the same name, (and particularly the same geographical name) the homophones of each known alphabetical power. In this stage of the inquiry much caution, or, if I may so call it, "*critique*," has been rendered necessary; for although two Inscriptions may be absolutely identical in sense, and even in expression, it does not by any means follow that wherever one text may differ from the other, we are justified in supposing that we have found alphabetical variants. Many sources of variety exist, besides the employment of homophones. Ideographs or abbreviations may be substituted for words expressed phonetically; sometimes the allocation is altered; sometimes synonyms are made use of; grammatical suffixes and affixes again may be employed or suppressed, or modified at option. It requires, in fact, a most ample field of comparison, a certain familiarity with the language, and, above all, much experience in the dialectic changes, and in the varieties of alphabetical expression, before variant characters can be determined with any certainty. By mere comparison, however, repeated in a multitude of instances, so as to reduce almost infinitely the chance of error, I have added nearly fifty characters to the hundred which were previously known through the Persian key; and to this acquaintance with the phonetic value of about one hundred and fifty signs, is, I believe, limited my present knowledge of the Babylonian and Assyrian alphabets.

I will now offer a few remarks on the nature and structure of these alphabets. That the employment of the Cuneiform character originated in Assyria, while the system of writing to which it was adapted was borrowed from Egypt, will hardly admit of question. Whether the Cuneiform letters, in their primitive shapes, were intended like the hieroglyphs to represent actual objects, and were afterwards degraded to their present forms; or whether the point of departure was from the Hieratic, or perhaps the Demotic character, the first change from a picture to a sign having thus taken place before Assyria formed her alphabet, I will not undertake to decide; but the whole structure of the Assyrian graphic system evidently betrays an Egyptian origin. The alphabet is partly ideographic and partly phonetic, and the phonetic signs are in some cases syllabic, and in others literal. Where a sign represents a syllable, I conjecture that the syllable in question may have been the specific name of the object which the sign was supposed to depict; whilst in cases where a single alphabetical power appertains to the sign, it would seem as if that power

had been the dominant sound in the name of the object. In this way, at any rate, are we alone, I think, able to account for the anomalous condition of many of the Assyrian signs, which sometimes represent phonetically a complete syllable, and sometimes one only of the sounds of which the syllable is composed¹. It cannot certainly be maintained that the phonetic portion of the alphabet is altogether syllabic, or, that every phonetic sign represents a complete and uniform articulation. There is, it may be admitted, an extensive syllabarium, but at the same time many of the characters can only be explained as single consonants. These characters again may be usually distinguished as initial and terminal; that is, the vowel sound which is their necessary accompaniment, and which must be supplied according to the requirements of the language, precedes one class of signs and follows another, but in a few instances the character may be employed either to open or close an articulation indifferently; and the entire phonetic structure is thus shown to be in so rude and elementary a state, as to defy the attempt to reduce it to any definite system. A still more formidable difficulty, one, indeed, of which I can only remotely conjecture the explanation, is, that certain characters represent two entirely dissimilar sounds,—sounds so dissimilar, that neither can they be brought into relation with each other, nor, even supposing the sign properly to denote a syllable, which syllable on occasion may be compressed into its dominant sound, will the other power be found to enter at all into the full and original articulation².











¹ There are thus a series of characters which fluctuate between *t* and *b*, such as , , , &c. They represent sometimes the complete syllable, but more usually one only of the component sounds. They may perhaps be illustrated by a comparison with the Sanskrit , which has produced *dic* in Greek, and *bis* in Latin. Many other characters also have double powers; the  represents indifferently the *r* and *s*, and at Behistun the  for *t*, is indistinguishable from the sign which answers to *Par*.












² I take for an example the character . This sign certainly represents phonetically an *aleph*, *N*, but it is also the ideograph for "a son," and in that capacity must, I think, be sounded *bar*. The same sound of *bar* would seem to appertain to it in the name of the Euphrates, where as the initial sign it replaces  *b*, or  *bar*, but as the final letter of the name of Nineveh (   or   ) it must be a simple labial; while in the names of Nabopolassar, (the father, of Nebuchadnezzar) and Sardanapalus, we must give to the sign in question the pronunciation of *pal*, that articulation, pro-

Some of these anomalies belong to the graphic system of Egypt, but some appear peculiar to Assyria. In many other respects, however, the identity of the two systems is complete. Non-phonetic signs are used as determinatives, precisely in the same manner, though not perhaps to the same extent, as in Egyptian, and the names of the gods are represented by signs, which appear in some cases to be arbitrary monograms, but which are more generally, either the dominant sound of the name, or its initial phonetic power¹, which is used for the same purpose in the Demotic alphabet of Egypt. There is also to be remarked the same poverty of the elemental alphabetical sounds; the same want of distinction between the hard and soft pronunciation of the consonants; the same mutation of the liquids and other phonetic powers not strictly homogeneous²; the same extensive employment of homophones. The whole system, indeed, of homophones is essentially Egyptian, and could only, I think, have arisen with a nation which made use of picture writing before it attempted alphabetical expression.

In some respects the Assyrian alphabet is even more difficult to be made out than the Egyptian. In the latter, the object depicted can almost always be recognized, and the Coptic name of the object will usually give, in its initial sound, the phonetic power of the hieroglyph; whereas in Assyrian, the machinery by which the power is evolved is altogether obscure—we neither know the object represented, nor if we did know it, should we be able to ascertain its Assyrian name—

bably being considered by the Assyrians and Babylonians to be phonetically identical with *bar*.

¹ For instance, the ordinary sign for *Bel* is a simple B, ;  stands for *Sut*;  for *Husi*. In many cases, however, the monograms seem to be arbitrary, as in  for *Nit*; ,  or  for *Nelo*;  for *Hem*;  another sign for *Bel*;  for *Sut*, &c., &c. The phonetic rendering of proper names in Assyrian depends almost entirely on a full understanding of the Pantheon, and this is unfortunately the most difficult branch perhaps of the whole Cuneiform inquiry.

² I refer to the interchange of the *l* and *v*, exemplified in such characters as , , , and also in  or ,  or . Many other signs represent the *l*, and *d*, or *t*, indifferently, such as  or ,  or , &c. There is also the greatest possible difficulty in distinguishing between the *k*, and the *d*, or *t*; and the gutturals and sibilants everywhere interchange.

everything has to be subjected to the "experimentum crucis;" and although, in working out this tentative process, the reduced number of the Assyrian signs, the key of eighty proper names, and the unlimited facilities for comparison, tend essentially to lessen the labour, it may be doubted if these united aids are equivalent to the single advantage which Egyptologists enjoy of being able to apply the Coptic vocabulary to the elimination of the phonetic powers of the hieroglyphic signs.

With regard also to the employment of the Cuneiform characters, it is important to observe, that the Assyrian alphabet, with its many imperfections, its most inconvenient laxity, and its cumbrous array of homophones, continued, from the time when it was first organized upon an Egyptian model, up to the period, probably, of the reign of Cyrus the Great, to be the one sole type of writing employed by all the nations of Western Asia, from Syria to the heart of Persia: and, what is still more remarkable, the Assyrian alphabet was thus adopted without reference to the language, or even to the class of language, to which it was required to be applied. There is, thus, no doubt but that the alphabets of Assyria, of Armenia, of Babylonia, of Susiana, and of Elymais are, so far as essentials are concerned, one and the same; there are peculiarities of form, a limitation of usage, an affection for certain favourite characters, incidental to each of the localities; but unquestionably the alphabets are "au fond" identical, while the language of Armenia certainly, and the languages of Susiana and Elymais probably, are not of the same stock even as the dialects spoken in Assyria and Babylonia.

Having shown the means by which a knowledge has been obtained of the Assyrian alphabet, I now proceed to consider the language. The same process which led to the identification of the signs of the alphabet was afterwards applied to the language; that is, as duplicate names determined the value of the Assyrian characters, so did duplicate phrases give the meaning of the Babylonian vocables, and afford an insight into the grammatical structure of the tongue. The stately but sterile formula of Royal commemoration, to which are devoted all the ordinary trilingual tablets of Persia, were certainly anything but favourable to this reanimation of a lost language; but still they were not without their use. They furnished a basis of interpretation, which was afterwards improved and enlarged by a careful dissection of the Inscription which is found on the tomb of Darius at Nakhsh-i-Rustam¹, and by a minute analysis of the fragments which remain

¹ I take this opportunity of mentioning that I am indebted to the late Mr. Tasker for a very excellent copy of the Nakhsh-i-Rustam Babylonian Inscript-

of the great Babylonian translation at Behistun. If the Behistun Inscription had been recovered in as perfect a state as the less celebrated record at Nakhsh-i-Rustam, all the essential difficulties of decipherment would have been at once overcome. There is so much variety, both of matter and of idiom, in the former document, that a complete and rigid translation of the Persian text in the Babylonian character and language would have furnished materials for a grammar and compendious vocabulary. Unfortunately, however, the left half, or perhaps a larger portion even, of the tablet is entirely destroyed, and we have thus the mere endings of the lines throughout the entire length of the Inscription; the fragments which in several of the most interesting passages are alone legible, being not only insufficient to resolve difficulties, but sometimes actually affording of themselves fresh enigmas for solution.

I will frankly confess, indeed, that after having mastered every Babylonian letter, and every Babylonian word, to which any clue existed in the trilingual tablets, either by direct evidence or by induction, I have been tempted, on more occasions than one, in striving to apply the key thus obtained to the interpretation of the Assyrian Inscriptions, to abandon the study altogether in utter despair of arriving at any satisfactory result. It would be affectation to pretend that, because I can ascertain the general purport of an inscription, or, because I can read and approximately render a plain historical record like that upon the Nineveh Obelisk, I am really a complete master of the ancient Assyrian language. It would be disingenuous to slur over the broad fact, that the science of Assyrian decipherment is yet in its infancy. Let it be remembered, that although fifty years have elapsed since the Rosetta Stone was first discovered, and its value was recognized as a partial key to the hieroglyphs, during which period many of the most powerful intellects of modern Europe have devoted themselves to the study of Egyptian; nevertheless, that study, as a distinct branch of philology, has hardly yet passed through its first preliminary stage of cultivation. How, then, can it be expected, that in studying Assyrian, with an alphabet scarcely less difficult, and with a language far more difficult than the Egyptian,—with no Plutarch to dissect the Pantheon and supply the names of the gods,—no Manetho or Eratosthenes to

tion, a copy, indeed, so good, that, with the exception of a few letters, I have been able to make out the entire legend, and have succeeded moreover in referring every word to its correspondent in the Persian original. Mr. Tasker, far more adventurous than Westergaard, descended by ropes from the summit of the cliff, and took his copy of the writing swinging in mid-air. He remained indeed for several hours in this perilous position during five successive days, in order to secure for his work the utmost available accuracy.

classify the dynasties and furnish the means of identifying the kings,—how can it be supposed, that with all the difficulties that beset, and none of the facilities that assist Egyptologists, two or three individuals are to accomplish in a couple of years, more than all Europe has been able to effect in half a century? I have thought it necessary to make these observations, in order to put the Society on its guard against running away with an idea, that the philological branch of the Assyrian inquiry has been exhausted; and that nothing now remains but to read inscriptions and reap the fruits of our knowledge. A commencement has been made; the first outwork has been carried in a hitherto impregnable position—and that is all. I will now state exactly what we know of the language.

The Babylonian translations of the Persian text in the trilingual tablets, including, of course, the long Inscription at Nakhsh-i-Rustam and the fragments from Behistun¹, have furnished a list of about two hundred Babylonian words, of which we know the sound approximately, and the meaning certainly. These words are almost all found either in their full integrity, or subjected to some slight modification, in Assyrian, and we can usually, by their means, arrive at a pretty correct notion of the general purport of the phrase in which they occur. The difficult, and at the same time the essential part of the study of Assyrian, consists in thus discovering the unknown from the known, in laying bare the anatomy of the Assyrian sentences, and, guided by grammatical indications, by a few Babylonian landmarks, and especially by the context, in tracing out, sometimes through Semitic analogies, but more frequently through an extensive comparison of similar or cognate phrases, the meaning of words which are otherwise strange to us. It is in this particular branch of the study, which I have prosecuted with great diligence and with all available care, that I think I have made good progress, having added about two hundred meanings certainly, and one hundred more probably, to the vocabulary already obtained through the Babylonian translations. I estimate the number of words which occur in the Babylonian and Assyrian Inscriptions at about five thousand, and I do not pretend to be acquainted with more than a tenth part of that number; but it must be remembered, that the five hundred known

¹ Many of the standard expressions at Behistun, such as "the rebels having assembled their forces came against me offering battle; I fought with them and defeated them, &c., &c.," prove to have been adopted almost verbatim from the Assyrian annals. It was, indeed, the discovery of known passages of this sort in the Obelisk Inscription, that first gave me an insight into the general purport of the legend,

words constitute all the most important terms in the language, and are in fact, sufficient for the interpretation of the historical Inscriptions, and for the general recognition of the object of every record, be it an invocation or dedication, or, as it more frequently happens, be it intended as a mere commemorative legend.

The next subject to be considered, is the actual language of the Assyrian and Babylonian Inscriptions, a language which is certainly neither Hebrew, nor Chaldee, nor Syriac, nor any of the known cognate dialects, but which, nevertheless, presents so many points of analogy with those dialects, both in grammatical structure and in its elemental words, that it may, I think, be determinately classed among the Semitic family. It will be observed, that I here include the languages of Assyria and Babylonia in a common category. They can hardly be termed identical, inasmuch as each dialect affects the employment of certain specific verbal roots, and certain particular nouns and adjectives; but they are at any rate sufficiently alike in their internal organization to render illustrations drawn from the Inscriptions of Babylon applicable to those of Assyria, in so far as such illustrations may be of philological value. Although, therefore, the examples which I am about to cite are chiefly taken from the Babylonian translations at Behistun, the Semitic affinities which they indicate may be understood to be all more or less shared by the Assyrian.

One of the peculiarities of Babylonian, and which must be carefully borne in mind in tracing etymologies, is, that the powers of *l* and *v*, when occurring as the complement of a syllable, and sometimes even as initial articulations, are almost undistinguishable; this interchange being the same that led the Phœnicians to write *Malik* and *Mók* indifferently¹, that softened the Hebrew הֵלֵךְ, "to go," into הָלַךְ in Chaldee; that has, in fact, induced the French universally to substitute *v* for the silent *l* of other languages, as in "*autre*" for *alter*, "*faux*" for *falsus*, "*chaud*" for *calidus*, &c., &c.

There is thus a definite article in Babylonian, frequently, but by no means invariably employed, which we may read *hav*; this article standing halfway, as I think, between the Berber *va* and the Coptic Π on the one side, and the Hebrew *hal* and Arabic *Al* on the other².

¹ See Gesen. Monum. Phœnic., vol. I., p. 431.


























² The true, or at any rate the primitive pronunciation of the Bab. article, which is also used as a demonstrative pronoun and adverb, may perhaps be *hav* or *havv*. Compare the Chaldee אֵלֵךְ or אֵלֵךְ, and see Gesenius's remarks on this word in page 84 of his Lexicon. Some of the forms of the article are,






In the Babylonian adjectives and nouns, a final *t* marks the feminine gender. The masculine forms its plural in *m*, *n*, and *t*, indifferently, thus fluctuating between Hebrew, Chaldee, and Arabic, and being also allied to the Coptic and Egyptian inflexion in *or*. The true feminine plural ending seems to be *dt*, but the distinction of gender is by no means rigidly observed; and moreover, as ideographs or monograms are frequently employed to mark these grammatical conditions, it is by no means easy to determine the pronunciation of the different forms.

I do not think that the construct state was marked by any orthographical change, or in fact, that there was any indication of a noun being placed "in regimine," beyond its being attached to the preceding noun by the relative *sha* or *da*. Other undoubted Semitic characteristics, however, are the formation of the abstract noun by the addition of *ut* to the primitive form, as in the words *arkut*, "kingdom," *galut*, "slavery¹," &c.; the occurrence of verbal nouns formed by prefixing *t*, as *takhaz*, "battle," from יָחַד, "to join together;" participial nouns, such as *Nikrut*, "the rebels," from the Niphal form of *kar*, "to revolt;" *mattet* for *mattenet*, "gifts" or "tribute," from *ten*, "to give," &c., &c.

The pronouns, however, are the most interesting of all the parts of speech, and are generally made use of as the touchstones of language. I shall examine them therefore in some detail.

The 1st personal pronoun of the sing. number in Bab. and Assy. is *anak*, closely resembling the Egyptian *Anok*, and Hebrew *Anokhi*; suffixed to nouns it is *uá* and *i*, to verbs *ani*; there are also two separate forms of the 1st person used with particles in a possessive, dative, ablative, and instrumental sense; they are *tuwa* and *ettuwa*, and are not clearly distinguishable. They are of course allied to the Coptic pronominal suffix of the 1st person, *ti*, and also to the præterite suffixatives of the 1st person, *ti* in Hebrew, *tu* in Arabic.

Achaem.  ,   ,   : Assyrian    ;
  ;   ; &c.: Babylonian, perhaps,   ;
   , &c., but of these last I am not at all certain.

I may here observe, that my reason for reading the abbreviated monogram , signifying "a king," as "*ar ko*" is, that at Behistun the word is always written at length , , , which can only be, I think, *Ar k a u*=*ar ko*. The other monogram , which has the full phonetic power of *men*, may very possibly stand for *melik*.



The pronoun of the 2nd pers. sing. in its separate form occurs only in one passage, and there it appears to be *nanta*, but the orthography is doubtful, and it may possibly be *anta*. Suffixed it is to be recognized everywhere as a simple *k*, an essential Semitic form.

The 3rd pers. sing. masc. is *su*, which is certainly the same as the Hebrew and Arabic *hu* or *huwa*, and suffixed either to verbs or nouns, it is usually *s*. The feminine personal pronoun I have not been able yet to identify, for notwithstanding all the Greek gossiping about the ladies of Assyria and Persia, in their records and sculptures the kings of those countries seem to have eschewed all notice of the female sex with true Oriental jealousy. As an affixed personal pronoun, the *s* seems in Assyrian and Babylonian to have answered equally for the masc. and fem. gender, whereas in Egyptian, it was applicable exclusively to the latter.

In the plural number I have not met with the pronoun of the 1st pers. used separately, but affixed it is *huni*, and with a possessive sense *etteni*, evidently the Coptic *ten*. The 2nd person plur. is also wanting; but the 3rd pers. plur. occurs very commonly, and is strictly African. In its separate form it is *ússen*, as in Saho, and suffixed it is *sen* for the masc., and *sent* for the feminine, forms which are very like Egyptian, and absolutely identical with the Berber. I observe, however, an instance of inflexion in the pronoun of the 3rd person, which is hardly reconcilable with Semitic usage. *Ussen* in the dative or accus. case, either takes a particle before, or an inflexion after it; that is, "for them" or "to them" *an ussen* and *ussen-at* are used indifferently, and sometimes even we have *senat* and *senut*¹.

Among the demonstrative pronouns we have for "this," *haga*² masc., *hagd* fem., and in the plur. *hagnit* or *hannit*. *Hagá*, I must add, is the Babylonian form of the Hebrew הָגָה, the sibilant being hardened to a guttural; and *kaza*, again, by a further change, becomes in Arabic كَذَا. Curiously enough, however, in Pushtoo, the Babylonian *haga* is found perfectly unaltered. The remote demonstrative pronoun "that," is *annut* or *allut*, the liquids, as I have before mentioned, interchanging; and although there is no exact representative of this term in Hebrew or Chaldee, there are many cognate forms, as הָנָה, אֱלֹהֵהּ, &c.

¹ These pronouns occur repeatedly at Behistun and Nakhsh-i-Rustam, and the forms used are precisely the same as we find in the earliest inscriptions of Assyria.

² It will thus be seen that the letter  or , which has been a stumbling-block to all previous inquirers, is a hard guttural.

I have now to consider the verbs.

In the present stage of our Babylonian knowledge, I cannot pretend to classify the verbal conjugations. They are, however, undoubtedly very numerous, and appear to be used almost indiscriminately. I recognize, I think, independently of those which may be formed by a permutation of the interior vowels, and which, owing to the want of points, it is impossible to discriminate, the Niphal, Hiphil or Hophal, and Hithpael of the Hebrew, together with the Chaldee Ithpaal, Aphel, Ittaphal, Shaphel, and Ishtaphel. There are also, I think, some of the more unusual conjugations which are found in Arabic and Amharic.

In one remarkable particular, however, the Babylonian verb varies from the usage of all other Semitic languages; it marks a distinction of persons by prefixes instead of suffixes¹. The 1st person thus always commences with an *ā* or *ē*; the 2nd apparently with *t*, and the 3rd with the long or short *i*, the theme being otherwise unchanged. In the plural, *ni* is prefixed for the 1st person; the 2nd person is used too rarely to admit of a rule being established; and in the 3rd person plural alone is there a suffix, which suffix, moreover, being a simple *n*, is, I think, the characteristic of number rather than of person. It may be understood, that these personal affixes are exceedingly liable to be confounded with the conjugational characteristics, and moreover, as there are no vowel points, that it is often impossible to say what conjugation may be used. A still greater difficulty exists in distinguishing between the past and the present tenses. I can hardly believe that the Babylonians did not recognize a distinction of time in the verb, (although the frequent employment of the present after the *wav* of conversion in Hebrew with a præterite sense, would seem of itself to indicate a certain want of precision on this point); yet, it is certain that there is but one general form of conjugating the verbal roots in Babylonian, according to persons, and that this form is used indifferently for the past and present tenses of the Persian translation².

The Babylonian, like all Semitic tongues, is rich in particles, although

¹ I am here alluding especially to the past tense, which in Hebrew and Arabic is considered to be the root of the verb. In the present tense, those languages, it must be admitted, prefix the personal characteristic, as in Babylonian, and make use indeed of the same, or nearly the same prefixes, to denote the different persons.

² This confusion of time may, perhaps, be considered to corroborate Mr. Garnett's explanation of the Semitic verb, as a mere abstract noun in combination with oblique personal pronouns.

it sometimes employs the same term in a great variety of senses; for instance, the forms *an*, *en*, and *in*, which are certainly closely allied, and which are used almost indifferently, express the sense of, "to," "for," "in," "by," "with," and are further employed to individualize the noun, like the Hebrew אֵת , and Chaldee ܐܝܬ , which are generally considered to mark the object of the verb, or, as we are accustomed to say, the accusative case¹.

I have not determined a great number of Assyrian and Babylonian adverbs, but those which I have found, are either formed immediately from pronominal themes, or they are compounded with prepositions, as in Hebrew.. The adverbs of negation are, *al*, *lā*, and *yān*, which are all strictly Semitic. The conjunctions in common use are, for "and," and "also," *u*, *va*, and *at*. The two first are common to all the Semitic tongues; the last may, perhaps, be compared with the Latin "*et*."

The observations which I have thus made, although necessarily brief and superficial, as they relate to those particular characteristics by which philologists are now agreed the type of a language should be tested, may be considered sufficient to establish the determinate classification of Babylonian and Assyrian as Semitic dialects; but it is not only in organization and grammatical structure that analogies may be traced between these languages on the one side, and Hebrew, Chaldee, and Coptic on the other. There is also a very great resemblance in the vocabulary; that is, in the roots and stem words, which, next to the machinery for expressing the relations of time, place, person, number, gender, and action, are the most important aids to the identification of the lingual type.

The following examples will fully bear out this assertion, and will moreover show, that as vowel sounds are now admitted to be of secondary developement, and of no real consequence in testing the element of speech, the roots are almost universally biliteral; the Babylonian and Assyrian being thus found in a more primitive state than any other of the Semitic dialects of Asia open to our research, inasmuch as the roots are free from that subsidiary augment which in Hebrew, Aramæan, and Arabic has caused the trilateral to be usually regarded as the true base, and the biliteral as the defective one.

¹ Other Babylonian particles of undoubted Semitic origin are, *lipenai*, "before;" *itta*, "with;" *ad*, "to;" *anog*, "in front of," &c. Compound prepositions are also extensively used both in Assyrian and Babylonian.

Guv, "to say;" a form which connects the Arabic ^ققل with the Persian گو or گف, or Sans. Gup, through the Babylonian ^وu.

Ten, "to give;" comp. Hebrew נתן, "to give;" Greek δω; Sans. *da*; Lat. "dono;" Egypt. *ti, ta, tei, to, &c.*

Ar, "to be," or "become;" this is Egyptian.

Duk, "to smite," or "kill;" Heb. דקק, "to beat small;" Arab. ^{دق}دق used exactly like the Bab. verb.

Rak, "to go over;" comp. Hebrew רגע, "to divide;" Arab. رجع "to return."

Mit, "to die;" Heb. מות in Heb.; مات in Arab.

Rad, "to go down;" comp. ירד in Heb.; ورد in Arab.

Tá and *bá*, "to come;" comp. אתה and בוא.

Ru, "to go;" *ruh*, in vulgar Arab.; and the same in the Arian languages.

El, "to go up," or "ascend;" עליה in Heb.; and على in Arab.

Ber, "to cross over;" *ibar* in Heb. and Arab.

Lak, "to reach;" comp. Arab. ^للقي

Kun, "to appoint," "establish," or "do;" כון in Heb.; and allied, I think, with the Pers. ^{کن}کن

Tseb, "to set up," or "fix;" comp. יצב, נצב in Heb.; and نصب in Arab.

Sib, "to dwell;" Heb. ישב.

Men, "to allot;" Heb. מנה.

A number of other roots are not so immediately to be recognized, but are all probably more or less connected with Semitic forms. Such as *bes*, "to do," or "make;" *ver*, "to see;" *kher*, "to receive;" *sar*, "to go out;" *kem*, "to take away;" *bám*, "to arise;" *raz*, "to lie," or "deceive;" *kar*, "to rebel;" *bar*, "to send;" *zat*, "to seize," &c.

As a further proof of the identity of the Arabic ^ققل "to say," with the Bab. *guv*, it may be observed, that the same form answers in the Inscriptions for the word "all," which is כלל or כל, thus almost determinately connecting the *l* and *v*, and affording another example of the interchange of the gutturals.

The following nouns also may be of interest.

Et, "a father;" comp. *etf* in Egypt.; *Ata*, Turkish; Lat. *At-avus*¹.

Am, "a mother;" the same in Heb. and Arab.

Bar, "a son;" the exact Syriac form.

Arko or *eneko*, "a king;" comp. the Greek *αράξ*²; Lat. *rex*; "neg," in Ethiopian, "to rule;" whence *Negus*, &c., &c.; Armen. *arkai*; and perhaps Egypt. *erro*; the name *Abednego* may thus mean the same as *Abdulmalik*, "the slave of the king."

Beth, "a house;" *Ir*, "a city;" *bar*, "the earth;" *erts*, "land;" *sem*, "a name;" *raba*, "great;" *itsiv*, "faithful;" *hem*, "a day," for *yam*; *sekeb*, "a cross;" for *seleb*; all these being closely allied to the Hebrew and Arabic; others approach more nearly to the African.

Tahv, "a mountain;" Cop. 𐤕𐤁𐤕.

Sar, "a brother;" Cop. 𐤑𐤁𐤓.

Ter or *H-ter*, "a horse;" completely Egyptian.

In selecting these examples from the numerous lists which I have collected of Babylonian and Assyrian vocables, I have merely wished to give such a general view of those languages as may decide the question of their lingual type. For all those details of alphabetical structure, of grammatical relation, and of etymology, upon which depends the authenticity of the readings that I shall presently communicate to the Society, I must refer to the Memoir which I have for many years been employed in preparing for publication, and which will be printed in the Society's Journal with all convenient despatch³.

¹ In the term *etua*, which occurs so frequently in the trilingual inscriptions, the termination is the pronominal suffix of the 1st person, used independently of the possessive pronoun signifying "my."

² *αράξ* is for *a-nac-s*, as *rex* is for *rec-s*, *nuc* and *rec* being the stem-words; it is this positive identity of the *n* and *r* in the cognate forms, which makes me doubt whether << *n* may not stand for *eneko*, as >> *r* for *arko*, rather than retain its full phonetic power of *men*, as an abbreviation of *melik*.

³ I also wish to be understood, that in giving these examples, I do not consider myself pledged to their definite phonetic rendering. I have neither adopted, nor do I conceive it possible to adopt, any system with regard to the employment of the vowels in Assyrian and Babylonian, and no great dependence therefore can be placed on the appearance of the word in the Roman character.

I now proceed to an examination of the Inscriptions.

The discoveries of Mr. Layard and M. Botta are no doubt so well and so generally known, that in naming the Assyrian ruins, in order to identify the inscriptions appertaining to the different localities, I shall be sufficiently understood. As a preliminary step, however, and in order to avoid confusion, I must correct the nomenclature by which these ruins are usually designated. Nimrud, the great treasure-house which has furnished us with all the most remarkable specimens of Assyrian sculpture, although very probably forming one of that groupe of cities, which, in the time of the prophet Jonas, were known by the common name of Nineveh, has no claim itself, I think, to that particular appellation. The title by which it is designated on the bricks and slabs that form its buildings, I read doubtfully as Levekh¹, and I suspect this to be the original form of the name which appears as Calah in Genesis, and Halah in Kings and Chronicles², and which indeed, as the capital of Calachene, must needs have occupied some site in the immediate vicinity³; and I may add, that before I had deciphered the name of the city on the slabs of Nimrud, this geographical identification was precisely that at which I had arrived, from observing that the Samaritan version of the Pentateuch employs for the Hebrew Calah the term Lachisa, a form which Babylonian orthography shows

¹ The name is written indifferently 𐎶𐎵𐎶 𐎶𐎵 , 𐎶𐎵𐎶 𐎶 and 𐎶𐎵𐎶 𐎶𐎵 ; and the initial character which is thus common to all the forms, is one unfortunately regarding which I still entertain some doubt. Its complete syllabic power is, I think, *l-v*, (or, which would be the same thing in Assyrian, *r-m*), but it also appears very frequently to represent one only of these sounds, and whether this curtailment may be the effect of that resolution of the syllable into its component literal powers to which I have already alluded, or whether it may be owing to the homogeneity of the *l* and *v*, is a point which I cannot yet venture to decide. Such, indeed, is the laxity of alphabetical expression in Assyrian, that even if the true power of 𐎶𐎵𐎶 were proved to be *L-v*, I could still understand 𐎶𐎵𐎶 𐎶 being pronounced Halukh.

² See Gen. x. 11.; 2 Kings xviii. 11.; 1 Chron. v. 26.

³ It has been asserted that the Calachene of the Greeks was exclusively a mountain district; but I cannot see any sufficient grounds for that geographical restriction. Strabo (Lib. XVI., *ad init.*) in describing Assyria, classes together $\tau\acute{\alpha}$ $\pi\epsilon\tau\epsilon\iota\alpha$ $\tau\acute{\omega}\nu$ Νῑνυον $\pi\epsilon\delta\acute{\iota}\alpha$, $\Delta\omicron\lambda\omicron\mu\eta\eta\acute{\nu}\eta$ $\tau\epsilon$, $\kappa\alpha\iota$ Καλαχηνή , $\kappa\alpha\iota$ Χαζηνή , $\kappa\alpha\iota$ Ἀδιαβηνή , all these applying certainly to the low country between the mountains and the Tigris. In another passage, also, he says, $\xi\omega\varsigma$ $\tau\eta\varsigma$ Καλαχηνῆς , $\kappa\alpha\iota$ $\tau\eta\varsigma$ Ἀδιαβηνῆς , $\xi\theta\omega$ $\tau\omega\kappa\omega\upsilon$ Ἀρμενιακῶν ὄρων , (Lib. XI., p. 770,) thereby positively excluding Calachene from the mountains. Ptolemy, also, when he says that Calacine lies *above* Adiabene, means perhaps to the north of it.

to be absolutely the same as the Greek name *Larissa*¹, by which Xenophon designated the great ruined capital that was passed by the Ten Thousand², a few miles to the northward of the Lycus³. The real and primitive Nineveh, which is frequently mentioned in the inscriptions, and which appears to have been the proper seat of Assyrian royalty, I conjecture to have occupied the site where we now see the huge mound opposite to Mosul, surmounted by the pretended tomb of the prophet Jonas; for we have historical proof of this particular mound having been locally termed Nineveh, from the time of the Arab conquest down to comparatively modern times⁴; and I think, moreover, we may gather from the inscriptions, that the ruins a short distance to the northward, which are now termed Koyunjik, were not the true Nineveh itself, but formed a suburb of that capital⁵. The proper name by which Koyunjik was known I have not yet been able to make out upon the bricks, but under one form it would seem to resemble the title *Mespila*, by which Xenophon designated the ruins; and if such should ultimately prove to be the case, it will furnish us with an explanation of the Greek historian's silence on the subject

¹ Michaelis noticed the Samaritan לרסר in his *Spicilegium*, p. 247, but failed to recognize its identity with *Larissa*, though he must have remembered that Eusebius writes *Χαβασσοαράχο*; for the *Λαβοροσοάρχος* of Josephus.

² *Ἀφικοντο ἐπὶ τὸν Τίγρητα ποταμόν· ἐνταῦθα πόλις ἦν ἐρήμη, μεγάλη, ὄνομα δ' αὐτῆς Λάρισσα*.—Xen. *Anab.*, Lib. III., C. 4. 6—12.

³ The Jerusalem Targum and Jonathan translate the Calah of Genesis, by *Hadith*, הדית, a name which, owing to careless transcription and vicious punctuation, has usually been read *Parioth* or *Harioth*. *Hadith*, however, or “the New,” is the name of a large town in the immediate vicinity of Nimrud, built under the Sa-sanians, and restored by Merwan Ibn Mahommed, one of the earliest Arab leaders; and it was certainly, I think, in allusion to this place, that the Chaldee interpreters substituted הדית for כלח. See Yacút's *Lexicon*, in voce حديث.

⁴ The forts of Ninawi to the east, and of Mosul to the west of the Tigris, are mentioned in the accounts of the campaigns of Abdallah Ibn Mo'etemer, in A.H. 16, and of 'Otbeh Ibn Farkad, in A.H. 20. See Ibn Athir, quoting from Beladheri, in the annals of those years.

⁵ The name of Nineveh occurs upon most of the Koyunjik bricks, but it is united with a qualifying epithet, which denotes, I think, the particular northern suburb, and of which I have never yet met with a fair and legible impress. That Koyunjik can hardly be the true and original capital, I gather from the certainty we possess of its having been built by the son of the Khorsabad king, whilst Nineveh, under both its forms, 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵 and 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵, is frequently mentioned as the royal residence, in the Inscriptions of the Obelisk king, who lived perhaps a century earlier.

o Nineveh¹. The suburb, in fact, having outgrown the original capital before the extinction of the empire, may have conferred its own name of Mespila for a time on the whole mass of ruins; while in the end, antiquity may, as is so often the case, have re-asserted its right, and thus revived the ancient and indigenous title of Nineveh. Up to the present time excavations have not been attempted on this site,—the spot, indeed, is so much revered by the Mohammedans, as the supposed place of sepulture of the prophet Jonas, that it is very doubtful if Europeans will be ever permitted to examine it. Mr. Layard, however, will hardly leave Assyria without securing some specimens from the site, and these will be at any rate sufficient to decide the question of nomenclature.

The only other site, which it is at present necessary to mention, is Khorsabad, or, as it has been sometimes termed, the French Nineveh. This city, although an immediate dependency of Nineveh, had also a particular title, being called after the king who founded it. I cannot determinately read the king's name,—in fact, the name, in common with most others, had not, I think, any determinate or uniform phonetic rendering; but, under one of its forms, it may very well read Sargon, which we know from Isaiah to have been a name in use among the Assyrian monarchs, and which, singularly enough, is the actual designation applied by the early Arab geographers to the ruins in question².

Having thus distinguished the four localities of Nimrud or Halah, Nebbi Yunus or Nineveh, Koyunjik or Mespila, and Khorsabad or

¹ It seems to me, at the same time, very possible, that Xenophon's name of Mespila may denote Mosul, and not Nineveh. He says the Greeks encamped, *πρὸς τεῖχος ἔρημον μέγα, πρὸς τῇ πόλει κείμενον, ὄνομα δ' ἦν τῇ πόλει Μίσπιλα*, and we may very well understand the description which follows of the ruins to apply to the *τεῖχος ἔρημον μέγα*, "the great deserted inclosure," rather than to Mespila. If Xenophon, indeed, had forgotten the name of the ruins, nothing would have been more natural than for him to illustrate the position by a reference to the neighbouring city; and that the name of Mosul, which so very much resembles Mespila, is far more ancient than the Mohammedan period to which it has been usually assigned, can be proved, I think, from a variety of sources.

² Yacút, quoting from some unknown ancient author, speaks of Khurstabadh, *خوستاباذ*, as a village east of the Tigris, opposite to Mosul, among the dependencies of Nineveh, and adjoining the old ruined city of Sarghun, (written *صرغون* for *صرغون*), where treasure to a large amount had been found by excavating. It was I believe this very passage of Yacút, well known to the Mohammedan doctors, which led the Turkish authorities, in the first instance, to watch M. Botta's proceedings with so much jealousy and mistrust.

Sargon, I proceed to consider the Assyrian history. Our materials are, I regret to say, as yet of so limited and fragmentary a nature, that, however they may be calculated to awaken interest, or even to stimulate inquiry, they can yield, in their present shape, as far at any rate as chronology is concerned, no positive results.

It must be remembered that not only is the system of the Assyrian writing in the last degree obscure, and the language in which the writing is expressed, unintelligible, except through the imperfect key of the Behistun translations, and the faint analogies of other Semitic tongues, but that even if all the tablets hitherto discovered were as certainly to be understood as the memorials of Greece and Rome, we should still be very far indeed from possessing a connected history of the Assyrian empire. We have, it is true, several valuable records of particular kings, and we are able, in some instances, to work out a genealogical series to the extent of at least six generations, but such notices go but a very little way in filling up the long period of nine centuries which must have intervened between the first institution of the Assyrian monarchy and the final destruction of Nineveh, at the commencement of the sixth century before the Christian era. Until we shall discover something like epochal dates, either civil or astronomical, or until we shall have a complete royal list, extending from the commencement of the dynasty to some king mentioned either in sacred or profane history, whose era may thus furnish us with a starting-place, it will be in vain to hope to arrive at anything like a determinate chronology. All that we can do at present is to infer, from the internal evidence afforded by the inscriptions, the relative position of the different royal families; and the interval of time that may have elapsed between them; while, for anything like positive chronology, we are dependent on a process of induction still more feebly supported, and on collateral testimony still less susceptible of proof. I am certainly not wedded myself to any particular system or any particular authority; but that the Nimrud marbles are of a very high antiquity, far more ancient than the historic period of the Assyrian empire, to which they have been sometimes assigned, I cannot reasonably doubt. Comparing together, indeed, all the various sources of evidence that can be brought to bear upon the subject, and, relying principally on the indications of political geography, which it will be seen in the sequel the inscriptions themselves afford, the conviction has been almost forced on me that the era of the building of the north-west palace at Halah or Nimrud, which, as far as art is concerned, was certainly the most flourishing period of the Assyrian empire, and soon after which its political power also pro-

bably reached its culminating point, must have followed very closely on the extinction of the nineteenth dynasty of Egypt; the institution of the Assyrian monarchy thus pretty well synchronising with the Argive colonization of Greece and with the first establishment of the Jews in Palestine. At any rate we cannot, I think, be far wrong in assigning the greater portion of the Assyrian marbles that adorn our Museum, and particularly the famous black obelisk bearing the inscription which I shall presently translate, to the twelfth, or at earliest to the thirteenth century before the Christian era. I shall recur again to the chronological question, after I have given a précis of the contents of the inscriptions, and shall then succinctly state the grounds on which I have assumed this approximate date.

The earliest records that have been yet brought to light, written in the Cuneiform character, are certainly the inscriptions of the north-west Palace of Nimrud; these belong to a king, whose name I read as Assar-adan-pal, and whom I am inclined to identify with the Sardanapalus of the Greeks; not the voluptuary of historical romance, but the warlike Sardanapalus of Callisthenes¹, whose place of sepulture, marked by an enormous tumulus, Amynthas, an ancient Greek author, quoted by Athenæus, notices at the gate of the Assyrian capital². This tomb, I may add, which is in all probability the great Pyramid of Nimrud now being opened by Mr. Layard, was popularly supposed to have been erected by Semiramis over the remains of Ninus, and was thus usually placed at Nineveh instead of Halah; but Xenophon, the only eye-witness whose account has come down to us, correctly described the tumulus as the most striking feature among the ruins of Larissa, which was the name by which Halah was then known³.

But although this Sardanapalus, the builder of the north-west Palace of Nimrud, is the earliest Assyrian monarch whose annals have been


¹ As quoted by Suidas, *in voce* Σαρδανοπαλ.

² Amynthas, it is true, considers this capital to be Nineveh, and his historical authority is still further vitiated by his ascribing the capture of the city to Cyrus instead of Cyaxares; but at the same time, as he was a professed geographer, his statement is of value, that the tomb of Sardanapalus was in Assyria, and not in Cilicia, as the later Greeks unanimously believed. See Athen. Deip., lib. xii. c. 7.

³ The words of Xenophon are, Παρ' αὐτὴν τὴν πόλιν ἣν πυραμὶς λιθίνη, τὸ μὲν εὖρος ἐνὸς πλῆθους, τὸ δὲ ὕψος δύο πλῆθρων. Anab., lib. iii. c. 4. s. 11. The account given of this Mausoleum by Diodorus, quoting from Ctesias, is also very striking, but the value of the notice is destroyed by the geographical blunder of placing Nineveh on the Euphrates. Ovid alludes to the same spot under the name of "Busta Nini," in his story of Pyramus and Thisbe, though, with a poet's license, he transfers the locality to Babylon.





yet discovered, it does not by any means follow that he was the first founder of the city of Halah, still less that he was the first great builder in Assyria, or the first king who ruled over the land. On the contrary, it is an ascertained fact, that Sardanapalus did not stand nearly at the head of his line. Assyrian civilization, as exemplified in the Nimrud sculptures, could not, of course, have sprung full-grown from the womb of time. There must needs have been, as in Egypt, a long course of careful training, to have brought the inhabitants of the valley of the Tigris to that state of proficiency in the arts of life which is indicated by the monuments that have lately been disinterred, and in all probability, therefore, several dynasties ruled over Assyria anterior to that family which numbered the first Sardanapalus among its ranks. Of such dynasties, it is true, if we except the doubtful classifications of Alexander Polyhistor, and the still more suspicious lists of Ctesias and the chronologers, no historical traces whatever remain to us. There are no materials at present available to show how, where, or when, the civilization of Assyria was effected. The inscriptions do not even furnish any certain evidence as to the period at which the ancestors of Sardanapalus first attained kingly power; but still the names of several kings are either directly or indirectly mentioned; and these notices prove that a flourishing monarchy must have existed in the valley of the Tigris long anterior to the age of the Nimrud palace.

Sardanapalus, indeed, in every one of his inscriptions names both his father and his grandfather, and applies to each of them the title of "King of Assyria." In commemorating, moreover, the building of the palace at Nimrud, he speaks of a still earlier king, Temen-bar I., who was the original founder of the city of Halah. I cannot positively fix the interval between Temen-bar I. and Sardanapalus; in the Standard Inscription, I have been sometimes induced to read the passage in which the notice occurs, as "the stronghold of Halah, built by Temen-bar, who was my third ancestor¹;" while the inscription of a later king, which gives a sort of genealogical tree of the family, either transposes the order of the father and grandfather of Sardanapalus, or, breaking off the list at the latter king, it removes Temen-bar some degrees higher up the line, and even names an earlier monarch, Bel-


¹ This passage occurs in line 15, of No. 1 of the British Museum series; from a similar expression at Behistun, there can be no doubt but that the allusion is to a precession of race, but I question very much if the sign  can here represent a number.



takat(?) who seems to have founded the kingdom¹. Beyond, however, a mere string of titles difficult to understand, and possessing probably if understood, but little interest, we know nothing of these kings forming the early Assyrian succession, but the names. When I say, too, that we know the names, I merely mean that such names are recognizable wherever they occur; their definite phonetic rendering or pronunciation is a matter of exceeding difficulty, nay, as I think, of absolute impossibility; for, strange as it may appear, I am convinced that the early Assyrians did not distinguish their proper names by the *sound*, but by the *sense*; and that it was thus allowable, in alluding to a king by name, to employ synonyms to any extent, whether those synonyms were terms indifferently employed to denote the same deity, or whether they were different words used to express the same idea. This will be more easily understood as I proceed to notice the names. The title of Temen-bar is formed of two elements, Temen being the name of a god², which is, I believe, only met with in this proper name, and *bar* being perhaps the Hebrew בָּר, "beloved³." It would be allowable, according to the Assyrian usage, to represent this name by any words signifying "beloved of Temen;" and in reference to Temen-bar I., we do thus actually find the second element replaced by another monogram, which, although equivalent in sense, may possibly vary in sound⁴.

The next king's name is, perhaps, Hemenk or Hevenk, which would seem to be the same as the Evechius of the Greeks, a title which the chronologers assert to have been the true Chaldean

¹ I refer to the Inscription of the second    , published in Plate 70 of the British Museum series. I have not yet been able to assure myself of the meaning of the terms, nor the connexion of the clauses of this Inscription, but it seems quite impossible to reconcile the genealogical detail with the family notices contained in the legends of Sardanapalus and his son.

² This name might be read Deven as well as Temen. In fact, I consider the two forms to be identical in Assyrian.

³ The second element of this king's name, which is usually written , may also possibly have the power of *Sver* or *Smer*, rather than simple *Bar*, as it represents the first syllable in the name of the Magian impostor, which was *Bardiya* in Persian, but Σμέρδις in Greek.

⁴ In the Standard Nimrud Inscription the sign used is always , regarding the true phonetic power of which I am still in doubt; the genealogical inscription, however, No. 70, line 22, employs the same character, , which is used in the name of Temen-bar II., thus proving that the two titles are identical.

designation of Nimrud¹. The explanation of this name, however, is even more doubtful than its pronunciation. If it be a compound, the first element will be *Hew* or *Hem*, a well-known Assyrian god, who, as his figure is usually accompanied on the cylinders by a symbol representing "flame," may be supposed to be connected with the Baal Haman of the Phœnician cippi, and the Hamánim or "Sun images" on the altars of Baal, mentioned so frequently in Scripture². It is possible, at the same time, that Hemenk or Hevenk may have no connexion with *Hem*, but may be the name of a distinct deity very rarely mentioned; for I find in one passage Hevenk written exactly in the same manner, and called the father of Assarac³, the latter being the best known of all the members of the Assyrian Pantheon.

The name of the third king signifies, as I think, "the servant of Bar;" but it is quite impossible to give any definite form to the title; for the word servant is rendered by terms differing as much from each other as Abd and Khadim in Arabic; and Bar, moreover, is frequently replaced by Seb, these two names appertaining apparently to be the same deity⁴.

¹ The character which interchanges with or , as the initial sign of this king's name, being used at Behistun for the first syllable of the name of Imanish, may, I think, with some certainty be assigned the phonetic power of —m or —v, and I consider it almost immaterial in Assyrian how we complete the articulation. Where however represents a god, as in this name, we can never be sure that the phonetic power of the character is the value to be attributed to the sign. may be an abbreviation for *Khemosh*, (comp. Heb. *חִמּוֹשׁ*, and Polyhistor's name *Χωμόςβηλος*); or, , and may be ideographs for some god, whose name has not yet been phonetically identified. The homogeneity, indeed, of m and v, which are the true powers of and , is the chief argument I possess in favour of the phonetic reading of the name. For the Greek *Εβήχιος*, see Cory's Fragments, p. 67.

² Compare the Cylinders numbered 54, 58, 67, 133, &c., in Cullimore's collection.

³ I remarked this in an Inscription lately found at Koyunjik, which has not yet been published.

⁴ I conjecture that the abbreviation k, or the more complete form k, t, or with the determinative prefixed, , may represent the idea of "serving," the Assyrian term being perhaps cognate with the first syllable of the Arabic root *خدم*; and I further hazard an expla-

We now come to Sardanapalus, Assar-adan-pal, as I propose to read the three elements of which the name is composed¹; and with this king commences our knowledge of the extent and power of the Assyrian monarchy.



























In the north-west Palace of Nimrud there is an inscription of Sardanapalus repeated more than a hundred times; it contains a certain formula of royal commemoration, which, in regard to the titles employed, and the general character of the legend, was adopted by all succeeding kings of the dynasty in the dedication of their palaces.

It thus commences:—"This is the Palace of Sardanapalus, the nation of $\langle \text{Y} \rangle \text{ab} (?)$, which is also used for the first element of the name in place of Y , as an abbreviation of *abd*. With regard to the second element of the name, supposing the true phonetic power of X to be *Sver*, rather than *Bar*, as I generally render the sign, the variant monograms $\text{Y} \text{Y}$, $\text{Y} \text{Y}$ or $\text{Y} \text{Y}$, might perhaps be referred to this actual title; the first, or *sb*, being an abbreviation of the name; and the second, *sr*, being pronounced *sur*, which would be phonetically equal to *Sver*. At the same time, I think it safer to suppose *Bar*, *Seb*, and *Sur* to denote the same god, than to assume the phonetic equivalence of the monograms. Possibly, indeed, $\text{Y} \text{Y}$ which commences many names of gods, may be a distinct title, and the adjuncts may be qualifying epithets.





¹ I do not affect to consider this identification of the name of Sardanapalus as any thing more than a conjecture. The first element Y , representing by abbreviation the god Assarac, and also commencing the name of Assyria, had, I think, the true phonetic power of *As-sar*, but if, as would appear probable from the indifferent employment of Y and Y , the monogram should be here intended to denote the god, then a guttural must be introduced after Assar in pronouncing the king's name. The attribution again of the power of *adan* to the middle element, X or X , is exceedingly doubtful. The only direct argument in its favour is that X , as the determinative of "a province," interchanges with Y or Y , which has usually the phonetic value of *du*, while the adjunct X , I think, represents a terminal liquid, optionally softening to *u*. The last element, also, Y or Y , I merely read as *pal*, from its appearing to have that power in the name of Nabopalassar, father of Nebuchadnezzar, as explained in note 2, p. 405. These few remarks upon the component parts of the Assyrian royal names will show the extreme difficulty of ascertaining their true pronunciation.

supreme ruler, the King of Assyria; son of 'the servant of Bar²,' the great king, the powerful and supreme ruler, King of Assyria; who was

father of Belus, and the progenitor of all the gods. Curiously enough, also, Beyer, who annotated Selden's work, "de Diis Syris," and who illustrated the Biblical notices of the Assyrian and Babylonian gods by references to the Talmud and the Rabbinical traditions, states (page 323) that Nisroch was considered to be identical with the Greek Chronos or Saturn, thus confirming, on Jewish authority, the indication afforded by the epithets applied to Assarac in the inscriptions. It has been assumed pretty generally in England, that the vulture-headed god, who is very frequently figured on the Nineveh marbles, must necessarily represent the Biblical Nisroch, *nasr* or *nisr* signifying "a vulture," both in Hebrew and Arabic, and the Zoroastrian oracle, 'Ο δὲ Θεὸς ἐστὶ κεφαλὴν ἔχων ἰέρακος, appearing to refer to the same Assyrian divinity. I cannot, however, at all subscribe to this doctrine. *Nisr*, "a vulture," can hardly by possibility have any etymological connexion with Assarac, which is the true orthography of the name of the Assyrian god. I do not indeed think that the vulture-headed figure is intended to represent any god, in the popular acception of that term. I should rather consider it to be an allegorical figure—a symbol, perhaps, connected with the philosophy of early Magism—of which the hidden meaning was known only to the priesthood. If Nisroch or Assarac is figured at all upon the Assyrian marbles, I should suppose him, as the head of the Pantheon, to be represented by that particular device of a winged figure in a circle, which was subsequently adopted by the Persians to denote Ormazd, the chief deity of their religious system. The Zoroastrian oracle of the hawk-headed god may, at the same time, very possibly refer to the Nimrud figure; for all the Zoroastrian Cabala, and in fact, the whole structure and machinery of Magism, as detailed in the Zend Avesta and Bun Dehesh, were derived, I think, from the later Chaldees; but I take the Theos of the oracle to be used altogether in an esoteric sense, and to have no connexion whatever with the primitive and vulgar mythology of Assyria.

² My reasons for supposing  to represent Beltis, are, 1stly, a common variant groupe for the deity in question is,    , when  denotes *Bel*, and  is, I think, a feminine characteristic, or at any rate an epithet applying exclusively to goddesses; 2ndly, the deity     is symbolised on a cylinder, (see Cullimore's Cyl. No. 50) by a naked female figure nearly resembling the *Ken* of the Hieroglyphs; and 3rd, on the Obelisk, side 1, line 12, attached to   is the epithet            , "mother of the gods,"  being used at Behistun for the Persian *mâtâ*.

³ The epithet "*nero*," which I propose to render "shining," is applied to many of the gods; to Bel, to Bar, to Nebo (or Sut?), even to Assarac; and it can hardly therefore be made use of as an argument in favour of the Sabæism of the Assyrian worship. It is probably the same word which occurs in the Biblical Nergal.

⁴ The name of this deity is written indifferently   or  , but I have no clue to its identification in the general mythological system. At Khorsabad, Ani is usually joined with Ashtera, or the goddess Astarte.

⁵ The usual phonetic form of this name is, perhaps, Kati-bar.

son of Hevenk¹, the great king, the powerful and supreme ruler, King of Assyria." After this introduction, the inscription goes on apparently to notice the efforts made by the king to establish the worship of the Assyrian gods generally throughout the empire, and, in connexion with this subject, incidentally as it were, occurs a list of the nations tributary to Nineveh, which is of considerable interest in affording the means of comparing the extent of the kingdom as it was constituted at that time, with the distribution given in later inscriptions, when the empire had been enlarged by conquest.

I am able neither to follow the sense throughout, nor even to read with any certainty some of the names, but I can still obtain a general insight into the geographical distribution. Firstly are mentioned the people of Nahiri (or Northern Mesopotamia²), of Lek (perhaps the Lycians before they moved to the westward), of Sabiri (the Sapires³ ?), and of the plains sacred to the god Hem⁴. There is then an allusion to the countries beyond the river Tigris⁵ as far as

¹ I may as well note that it is extremely doubtful if the middle character of this king's name really represent an *n*; I merely give it that power as I find 𐎶 , and 𐎶𐎶 or 𐎶𐎶𐎶 , to interchange in the word for "man;" but there are equally strong grounds for classing 𐎶 among the dentals; and the name in question therefore may very possibly read Hem-tak or Hem-tag.

² Nahiri frequently occurs as the name of a country about the head streams of the Tigris and Euphrates; it is, I think, the same as the Biblical נַחֲרִים נַחֲרִים, and the Egyptian Naharaina; but I do not consider either of those names to apply to Mesopotamia, as that term was used by the Greek geographers.

³ If this be the same name as the Khorsabad 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 , the allusion will be to a country lying between Armenia and Susiana, the Matiene, in fact, of Herodotus.

⁴ The word which I doubtfully render "plains," is written 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 or 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 or 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 or 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 , and is, I believe, identical with the Biblical אֲרָם. Gesenius, it is true, translates Aram, "highlands," but this is hardly in accordance with the use of the term in Scripture; and I observe, moreover, in the last line of the Obelisk, the verb 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 , "I came down," in connexion with 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 , which would seem to show that the word must signify "low country" or "plains."

⁵ The most ancient name of the Tigris was 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 , of which I cannot venture to give the pronunciation. Its better-known appellation was Barseber, always written in Assyrian 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 , but with many variants in Hieratic and Cursive Babylonian. (Compare India-House Slab, col. 5, lines 15,

Syria¹; and after the enumeration of several names not otherwise known, there is a notice of the city of Rábek, which from many points of evidence in the later inscriptions, I believe to represent Heliopolis, the capital of Lower Egypt. In continuation I read, "I received homage (?) from the nations on the river Shenat, as far as Armenia²; from the plains of Larri to Ladsán; from the people beyond the river Zab as far as the city of Tel Biari; from the city of Tel Abtan to the city of Tel Zabdan; from the cities of Akrima and Kharta, and the sea-coast dependent on Taha-Tauis, to the frontiers of my country I brought abundance: from the plains of Bibad as far as Tarmar, I bestowed (all) upon the people of my own kingdom³."

38, 45; col. 7, line 46, &c.; Bellino's Cylinder, col. 2, line 42; Rich, Pl. IX, No. 4, l. 22.) The name of Dikel or Diglet, (Chaldee 𐎠𐎢𐎣𐎢𐎶, Arabic دجله,

Diglito of Pliny,) however, was not unknown. At Behistun, 𐎠𐎢𐎣𐎢𐎶 is

used in one passage for the more usual 𐎠𐎢𐎣𐎢𐎶 𐎠𐎢𐎣𐎢𐎶, and I have found the same title, but slightly varied in the spelling, in an Inscription of the time of the Khorsabad king. See British Museum series, No. 65, l. 14, where the phrase occurs, "I slew the Arab tribes who dwelt upon the Tigris."

¹ In some copies of this Inscription Syria is denoted by the capital city of the Hittites, a city well known, under a slightly altered form, in the Inscriptions of the Khorsabad period, and which I have been often tempted to read Shaluma, and to identify with Jerusalem, (𐎠𐎶𐎶𐎵 or Σόλυμα): but generally, instead of this name, 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 or 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶, we have the country of 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶, which is certainly, I think, the Lemenen or Remenen of the Hieroglyphs, and which may very possibly be the Scriptural Lebanon. Comparing, indeed, the following passages in the British Museum series, Pl. 26, l. 16; Pl. 39, l. 23; and Pl. 40, ls. 40 and 45, we can hardly doubt but that the three names 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶, 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 and 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶 𐎶𐎶𐎶𐎶, or *Lemenen*, *Hamana*, and *Serar*, refer to places immediately contiguous, and the most reasonable explanation therefore certainly is, that they denote the great mountain chain of Syria, the hills, in fact of Lebanon, Amana, and Shenir, which are associated in the famous passage of Solomon's Song, c. iv. v. 8, and which are otherwise well known in geography.

² Of the river Shenat I know nothing, as it is not mentioned in any other passage. The etymology, however, would seem to be Zend; compare *sventa*, "holy." Armenia in this passage is sometimes named Ararat and sometimes Aram Bedan, to the identification⁴ of which, unless it be the Padan Aram of Scripture, I have no clue whatever.

³ In this list the only remarkable place is Taha-Tanis, or, as it is may rather perhaps be read, Taha-Dünis. This was a very celebrated city of Lower Chaldaea,

Now this list is no less remarkable for what it omits than what it mentions. It would seem as if the sea-coast of Phœnicia had not yet fallen under the power of Assyria, nor the upper provinces of Asia Minor—nor the high land of Media; and if Susiana and Babylonia were included in the empire, as the mention of Taha-Tanis would appear to indicate, they were not held of sufficient account to be noticed. Very different, it will be seen, was the condition of Assyria at a later epoch. The period when Phœnicia first came under the dominion of Assyria is fixed by a subsequent legend of Sardanapalus, which is inscribed upon the votive altar, as well as upon the Bull and Lion, which the king dedicated to his tutelary deity on returning from the Syrian campaign. In that inscription it is expressly stated, that while the king was in Syria he received the tribute of the kings of Tyre, and Sidon, of Acre, of Byblos, of Berytus, of Gaza, of Baiza (?), and of Aradus; a complete list being thus given of the great maritime cities of Phœnicia¹. There is still another inscription of Sardanapalus and several detached fragments which are strictly and purely historical, being designed to illustrate the subject of the bas-reliefs to which they are attached. These pieces give succinct notices of the different wars in which the monarch was engaged, but they are all unfortunately in so mutilated a state, that a connected narrative cannot be obtained from them².

- It will be of more interest then to pass on at once to Temen-bar II., the son of Sardanapalus, who built the centre palace at Nimrud, and of whose annals the Obelisk supplies us with a notice of singular completeness and detail. Comparing, indeed, the Obelisk Inscription with the writing upon the votive Bulls belonging to the Centre Palace, which were dedicated apparently at an earlier period of Temen-bar's reign, and with the legend on the statue found at Kileh Shergat, which was designed especially to commemorate the king's southern expe-

but I cannot identify the name in classical or Scriptural geography. I shall reserve all inquiry into the other names, the phonetic rendering of many of which is extremely doubtful, for the Memoir to be published hereafter.

¹ See British Museum series, Pl. 43, l. 10. The names of Tyre and Sidon, of Akarra (for the Heb. עֲכָר, Greek 'Ακί, and modern Acre), of Gubal (Heb. גּוּבָל, and Greek Βύβλος,) and Arvada (Heb. אֲרַדָּא, and Greek 'Αράδιω) are certain; but the other three, which are moreover of very rare occurrence, are doubtful. In the Khorsabad Inscriptions, for Akarra or Acre is often substituted Maratha, which is of course the Μάραθος of Strabo, "πόλις ἀρχαία Φοινίκων," Lib. xvi. p. 518. As these sheets are passing through the press, I observe that Dr. Hincks has mistaken these Phœnician cities of Acre and Marath for the remote provinces of Aria and Parthia, provinces to which I am pretty sure the Assyrian arms never penetrated. See Khorsabad Inscriptions by Dr. Hincks, p. 31.

² See British Museum series, Plates 48 and 49.

dition, we have as complete a register of the chief events of the period as could well be desired.

Of this register, I will now accordingly undertake to give an explanation, merely premising that, although considerable difficulty still attaches to the pronunciation of the proper names, and although the meaning of particular passages is still unknown to me, I hold the accurate ascertainment of the general purport of the legend, to be no more subject to controversy than my decipherment of the Persian Inscriptions of Behistun¹.

The inscription on the Obelisk commences with an invocation to the gods of Assyria to protect the empire. I cannot follow the sense of the whole invocation, which takes up fourteen lines of writing, as well from the obscurity of the titles appertaining to the gods, as from the lacunæ in the text owing to the fracture of the corner edge of the gradines; but I perceive, I think, the following passages:—"The god Assarac, the great lord, king of all the great gods; Ani, the king; Nit, the powerful, and Artenk, the supreme god of the provinces²; Beltis, the protector, mother of the gods." A few lines further on we have "Shemir, (perhaps the Greek Semiramis) who presides over the heavens and the earth" (another god whose name is lost). "Bar," with an unknown epithet; then " - - - Artenk, Lama, and Horus;" and after the interval of another line, " - - - Tal, and Set, the attendants of Beltis, mother of the gods³." The favour of all these deities with Assarac at their head, the Supreme God of Heaven, is invoked for the protection of Assyria. Temen-bar then goes on to give his titles and genealogy; he calls himself, King of the Nations who worship Husi (another name for the god Shemir) and Assarac; King of Mesopotamia, (using a term which was afterwards particularly applied to the Euphrates⁴); son of Sardanapalus, the

¹ The claims here put forward require perhaps to be qualified, for I do not affect to consider my reading of the Obelisk Inscription in the light of a critical translation. Whenever, indeed, I have met with a passage of any particular obscurity I have omitted it, and the interpretation even which I have given of many of the standard expressions is almost conjectural. My object has been throughout to give a general idea of the nature of the Assyrian records, rather than to resolve particular difficulties of orthography or etymology.

² That the monogram $\Xi\Xi$ denotes the goddess Nit, (Egyptian Neith?), I infer from its being used at Behistun to express the last syllable in the name of king Nabunit, (*Ναβόνιτος*). Nit and Artank are named in the E. I. H. Insc., col. 4, l. 10.

³ Most of these names are very doubtful indeed.

⁴ The application to Assyria and Babylonia of the general name $\Xi\Upsilon$ $\Upsilon\Upsilon$, *Perrai*, seems to explain a passage in the Etym. Mag. Ἀσσυρία—ἡ Βαβυλωνία—τὸ μὲν πρῶτον ἱκαλεῖτο Εὐφράτις, ὕστερον δὲ Χαλδαία.

servant of Husi, the protector, who first introduced the worship of the gods among the many peopled nations (the exact terms being here used which answer to the "*dahyáwa paruwa-zana*" of Persepolis). Sardanapalus, too, is called the son of Katibar (or "the servant of Bar"), who was king of Zahiri, which seems to have been one of the many names of Assyria.

Temen-bar then says:—"At the commencement of my reign, after that I was established on the throne, I assembled the chiefs of my people and came down into the plains of Esmes, where I took the city of Haridu, the chief city belonging to Nakharni."

"In the first year of my reign, I crossed the Upper Euphrates, and ascended to the tribes who worshipped the god Husi. My servants erected altars (or tablets) in that land to my gods. Then I went on to the land of Khamána¹, where I founded palaces, cities, and temples. I went on to the land of Málar, and there I established the worship (or laws) of my kingdom."





















"In the second year, I went up to the city of Tel Barasba, and occupied the cities of Ahuni, son of Hateni. I shut him up in his city, I then crossed the Euphrates, and occupied the cities of Dabagu and Abarta belonging to the Sheta, together with the cities which were dependent on them².

"In the third year, Ahuni, son of Hateni, rebelled against me, and having become independent, established his seat of government in the

¹ This name has many different forms, but wherever it occurs, it denotes, I think, Northern Syria, or rather perhaps the particular mountain ranges stretching from Cilicia to Libanus, being in fact the *'Amaros* of the Greeks, and *אֲמָרֹת* of Scripture. (See authorities in Bochart's *Phaleg*. col. 359.) The name should be pronounced Hamána or Amána, I think, in preference to the form I generally use of Khamána.

² The Sheta or Khita are repeatedly mentioned in the Egyptian Inscriptions of the eighteenth and nineteenth dynasties. By Mr. Birch they have been supposed to represent the Chaldees. Others have identified them with the Scythians: whilst Bunsen has recognised in the Khita, the Hittites of Scripture, and this last explanation is undoubtedly the true one; for the Sheta of the Assyrian Inscriptions, (written Sveta or sometimes Khetta,) who are certainly the same people as the Khita of the Hieroglyphs, can be distinctly proved from the numerous notices concerning them, to have been the dominant tribe of Palestine, and the *אֲרֵץ הַחִתִּים* of Joshua, c. i. v. 4, and the *מַלְכֵי הַחִתִּים* of 2 Kings, c. vii. v. 6, have the same general application. This name *חִת*, indeed, appears to have always been the special and vernacular designation of Palestine, the governors of that province during the period of the Babylonish captivity, taking on their coins the title of *רֶשַׁת חִת*. See the Duc de Luynes's Essay on Phœnicia, p. 76, sqq.

city of Tel Barasba. The country beyond the Euphrates¹ he placed under the protection of the god Assarac, the Excellent, while he committed to the god Rimmon, the country between the Euphrates and the Arteri, with its city of Bither², which was held by the Sheta. Then I descended into the plains of Elets. The countries of Elets, Shakni, Dayini, Enem (?), Arzaskán, the capital city of Arama, king of Ararat, Lazan and Hubiska, I committed to the charge of Detarasar. Then I went out from the city of Nineveh, and crossing the Euphrates, I attacked and defeated Ahuni, the son of Hateni, in the city of Sitrat, which was situated upon the Euphrates, and which Ahuni had made one of his capitals. The rest of the country I brought under subjection; and Ahuni, the son of Hateni, with his gods and his chief priests, his horses, his sons and his daughters, and all his men of war, I brought away to my country of Assyria. Afterwards I passed through the country of Shelár (or Kelár,) and came to the district of Zoba. I reached the cities belonging to Nikti, and took the city of Yedi, where Nikti dwelt. (A good deal of this part of the inscription I have been obliged to translate almost con-
 jec-

¹ The name of the Euphrates is written in Assyrian   or  , or optionally with a final *t*, ( or  or ) and each of these forms must, I think, be sounded *Berát* or *Perat*. The Babylonian orthography was    , which, I think, was also pronounced *Huperátah*, although singularly enough this particular term (spelt in many different ways, and generally without the initial sign) was used in all the Assyrian Inscriptions from the earliest period to the latest, as one of the titles of the monarch, and certainly with no reference whatever to the river. For the Babylonian form of the name as it occurs at Behistun, see India-House Inscription, col. vii. l. 45; Bellino's Cylinder, side ii, l. 40; Rich, Pl. IX. No. 4. l. 21; British Museum series, Pl. 18, l. 32; and for the same word written in full, instead of with the syllabic sign  or  or , see British Museum series, Pl. 76, l. 3. Care must be taken not to confound with the name of the Euphrates the word, usually written    , and preceded by the determinative of "water," which occurs so often at Khorsabad in connexion with the   or "Chaldees," and in many other places besides; for this term, although pronounced nearly in the same manner as the name of the Euphrates, does in reality apply to the "sea" or "ocean," being perhaps cognate with the Latin *mare*.

² Bither is, perhaps, the Biblical פִּתְרָה (Numb. xxii. 5, and Deut. xxiii. 5) but all this part of the Inscription is very difficult, and little dependence can be placed on the translation.

turally, for on the Obelisk the confusion is quite bewildering; the engraver having, as I think, omitted a line of the text which he was copying, and the events of the third and fourth year being thus mingled together; while in the Bull Inscription, where the date is preserved, showing that the final action with Ahuni took place in the fourth, and not in the third year, the text is too much mutilated to admit of our obtaining any connected sense. I pass on accordingly to the fifth year.)

"In the fifth year, I went up to the country of Abyari; I took eleven great cities; I besieged Akitta of Erri in his city, and received his tribute.

"In the sixth year, I went out from the city of Nineveh, and proceeded to the country situated on the river Belek¹. The ruler of the country having resisted my authority, I displaced him and appointed Tsimba to be lord of the district; and I there established the Assyrian sway. I went out from the land on the river Belek, and came to the cities of Tel-Aták (?) and Habaremya. Then I crossed the Upper Euphrates and received tribute from the kings of the Sheta. Afterwards I went out from the land of the Sheta and came to the city of Umen (?) In the city of Umen (?) I raised altars to the great gods. From the city of Umen I went out and came to the city of Barbara. Then Hem-ithra of the country of Atesh², and Arhulena

¹ The Belek is, I conclude, the Βίλιχος of the Greeks and modern بلخ Bilikh, a large affluent of the Euphrates above the Khabúr.

² Atesh is so frequently mentioned in this Inscription, and is apparently a place of so much consequence, as to merit some inquiry into its site. Its connexion with the Sheta would seem to identify it determinately with the Atesh or Ati of the Egyptian records, a city, as Mr. Birch observed in a recent paper, "the ascertaining the site of which has been deemed one of the greatest desiderata in Egyptian history." (See Trans. of Royal Society of Literature, vol. II. 2nd Ser. p. 336.) Mr. Birch, from an examination of the Egyptian evidence regarding Atesh, came to the conclusion that it was a large city of Syria, to the north of Palestine, and the Cuneiform indications all tend to the same emplacement. That it could not have been far from the sea-coast of Phœnicia, is proved by the Assyrian king having received, whilst sojourning in the land of Atesh, the tribute of Tyre and Sidon, and Byblos; and its uniform association with Hamath would further naturally point out Emessa or Hems, as its modern representative, these two cities having been conjoined in all ages both politically and geographically. It is interesting, therefore, to remark that St. Jerome, in commenting the passage of the Toldoth Beni Noah, where the Zemarite and the Hamathite are spoken of together, explains the former name, which the Jerusalem Targum and all the Oriental Jews identify with Hems or Emessa, as applying to a famous city of Cœlo-Syria, called Edessa. The critics, of course, unanimously suppose that Edessa is here an error for Emessa; but I would inquire if Edessa might not

of Hamath, and the kings of the Sheta, and the tribes which were in alliance with them, arose: setting their forces in battle array they came against me. By the grace of Assarac, the great and powerful god, I fought with them and defeated them; 20,500 of their men I slew in battle, or carried into slavery. Their leaders, their captains, and their men of war, I put in chains.

"In the seventh year, I proceeded to the country belonging to Khabni of Tel-ati. The city of Tel-ati, which was his chief place, and the towns which were dependent on it, I captured and gave up to pillage. I went out from the city of Tel-ati and came to the land watered by the head-streams which form the Tigris. The priests of Assarac in that land raised altars to the immortal gods. I appointed priests to reside in the land to pay adoration to Assarac, the great and powerful god, and to preside over the national worship. The cities of this region which did not acknowledge the god Assarac I brought under subjection, and I here received the tribute of the country of Nahiri.








"In the eighth year, against Sut-Baba, king of Taha-Dunis, appeared Sut-Bel-herat and his followers. The latter led his forces against Sut-Baba and took from him the cities of the land of Beth Takara¹.





have been really an ancient name for Hems, an Hellenic form, indeed, of the Assyrian and Egyptian Atesh. St. Jerome could not possibly have meant the real Edessa, for that city was not in Cælo-Syria; nor was it ever conjoined with Hamath; nor could the Mesopotamian Edessa possibly represent the Atesh of the Hieroglyphics, for it was not situated upon a river; and the latter feature was the distinguishing local characteristic of the city taken by Sethos I. Whatever may be thought of this attempt to reconcile Atesh with Hems, through St. Jerome's employment of the name of Edessa, it is at any rate certain, that no cities of Syria will so well meet the Cuneiform requirements for Atesh and Hamath, as the modern حمص and حماة, and if we allow for some exaggeration on the part of the Egyptian artists in representing the Orontes as almost equal to the Nile, the pictures of the siege of Atesh, which Mr. Birch conjectures to have given rise to the Greek fable of the Assyrian campaign against Bactria, may, I think, be brought to apply equally well to the same locality of Hems. There are, however, some remarkable ruins on the Orontes above Hems, named قائم الكرم, which are said to be of an Assyrian character, and which may possibly mark the site of Atesh.










¹ I take this name from the Bull Inscriptions, but I do not think the place alluded to can be the famous Chaldean city of Beth Takara, of which mention is so frequently made at Khorsabad. All this part of the Inscription, however, describing the wars of Sut-Baba and Sut-Bel-herat, is exceedingly difficult, and I cannot conjecture even the meaning of several passages.





"In the ninth year, a second time I went up to Armenia¹ and took the city of Lunanta. By the assistance of Assarac and Sut, I obtained possession of the person of Sut-Bel-herat. In the city of Umen I put him in chains. Afterwards Sut-Bel-herat, together with his chief followers, I condemned to slavery. Then I went down to Shinar², and in the cities of Shinar³, of Borsippa⁴, and of Ketika⁵, I


































¹ The name here made use of on the Obelisk and in the Inscription on the Statue from Shergat, (which was dedicated in commemoration of this particular campaign) is *Hekdi*, and I translate it Armenia, from observing that at Khor-

sabad, the three names of    ,   , and






















   , or *Hekdi*, *Sheshah*, and *Ararat*, interchange; but I think that the province of Hekdi must also have included Adiabene; for in the Shergat Inscription it would certainly seem to intervene between Assyria and Babylonia.

² There is a name here used on the Obelisk and in the Shergat Inscription for Babylonia which deserves some attention; it is written   , and was pronounced, perhaps, *Pekhodh* or *Pekhods*, being, I think, the same as the Biblical פֶּקֹד, which in Jer. l. 21, and in Ezek. xxiii. 23, is understood to designate some part of the province of Babylon. The same name is found in several other inscriptions referring to Babylonia, (see among others, Khor. Ins. p. 152, 12; Is. 5, 8, 11); and on Bellino's Cylinder it is used almost indifferently for the more common term    . I take this opportunity, also, of suggesting that the ארץ כרתים, conjoined with *Pekod* in the verse above quoted, Jer. l. 21, may be identified with the   of the Inscriptions. The Cuneiform term is usually in the plural number, as the Hebrew is in the dual; the two names must be pronounced almost similarly and their geographical application can hardly vary.

³ I am hardly prepared to maintain that the ancient name of Babylonia,    , can be read phonetically as Shinar, though, if the Biblical title of שִׁנְעַר does anywhere occur in the Inscriptions, this group of characters has certainly the best claim to be considered its correspondent; for of the four signs which compose the name, the three last have certainly the powers s, r, h, and the first may possibly be s. Perhaps it would be a preferable explanation to regard the Cuneiform title as composed entirely of ideographs, and signifying "the country of the god Rah" (?), for the first sign, which has many variants, seems very frequently to denote a country; the second sign is the determinative of a god, and was, I think, in the early times used exclusively in that capacity; and with regard to the third element, we may very well understand that all the various forms, which it takes, and which cannot possibly be brought into phonetic identity, may be monograms or groups denoting the same deity. I do not lay much stress

erected altars and founded temples to the great gods. Then I went down to the land of the Chaldees⁶, and I occupied their cities; and I on the particular name Rah, but make use of it as the phonetic value of the characters most commonly employed. The chief objection to this explanation is, that the deity   is otherwise unknown in Assyrian mythology, (for it would hardly, I suppose, be allowable to compare 'Páa or Semiramis, the tutelary divinity of Babylon); but on the other hand, a comparison of a passage in the Khorsabad Inscriptions, Pl. 153, l. 5, where     is joined to    , with a passage in line 9 of the same plate, where the name of a well-known deity   , used geographically, is also joined to the same term, would certainly seem to place   and   in the same category of divinity. Of one thing, at any rate, I am pretty well persuaded, that     cannot represent Babylon phonetically. The name of Babel, usually written      or     , is never brought, so far as my experience goes, into the remotest alphabetical connexion with the other title, and until therefore I find the one term written with an *r*, , instead of an *l*, , or the other written with an *l* instead of an *r*, I shall hardly be brought to admit that they can be pronounced in the same manner, or indeed,⁷ that they represent phonetically the same name.

⁴ The name of Borsippa, is, I think, undoubted. It occurs in every notice of Babylon from the earliest time to the latest, and the name is written indifferently, Bartschah, Bartschah, and Bartsira, another example being thus afforded of the interchange of the *l* or *r* with the *v* or *b*.








⁵ The name written     on the Obelisk is replaced by     in the Bull Inscriptions, but I know nothing of the cities thus indicated, unless they are various forms for the name of Sitace. The chief place of Babylonia, in an Inscription of the Khorsabad period, (British Museum series, Pl. 68, l. 11,) is named    , and in Pl. 65, l. 19, of the same series, another place is mentioned, which also seems to have been a Babylonian capital.     may, perhaps, be the place of which the name is usually written  , and which has been already noticed. In a later age, the Jewish Sura was called מְסֻרָה מְסֻרָה, which somewhat resembles the Cuneiform orthography of   .











⁶ Although I always translate the Assyrian term   by Chaldeo,









marched on as far even as the tribes who dwelt upon the sea-coast. Afterwards in the city of Shinar, I received the tribute of the kings of the Chaldees, Hateni, the son of Dákri, and Baga-Sut, the son of Hukni, gold, silver, gems and pearls.

"In the tenth year, for the eighth time I crossed the Euphrates. I took the cities belonging to Ara-lura¹ of the town of Shalumas², and gave them up to pillage. Then I went out from the cities of Shalumas, and I proceeded to the country belonging to Arama, (who was king of Ararat.) I took the city of Arnia, which was the capital of the country, and I gave up to pillage one hundred of the dependent towns. I slew the wicked, and I carried off the treasures.

"At this time Hem-ithra, king of Atesh, and Arhulena, king of

from the location of the tribe to which the title belongs in Lower Chaldaea, that is, between Babylonia Proper and the sea, I am by no means sure that the Cuneiform characters will represent that name phonetically; nor am I satisfied that the Greek term *Χαλδαία*, for the Biblical *כַּלְדַּיָּא*, is of itself a genuine ancient form. At the same time, as the character  has properly the full syllabic power of *l-v*, it may, according to my system, represent one of those sounds without the other, and may even admit an initial vowel, or, which is the same thing in Babylonian, an aspiration; so that I think it quite possible   and   may be read *Halah* and *Haldi*, for Calah and Chaldi. Other readings have occurred to me for  , such as *Labdi* for Nabti, "the Nabathæans;" or *Ludi*, the Lud of Scripture, joined with Persia and Phut, (which latter is certainly the *Putiyá* of the Nakhsh-i-Rustam Inscription) in Ezek. c. 27, v. 10, and perhaps the Luten or Ruten of the Hieroglyphs; but on geographical as well as etymological considerations I prefer adhering to my translation of "*Chaldee*."

¹ This name is written indifferently    and    , leading to the inference that the monogram  denotes the same god as the group  , but I have not otherwise met with either of these forms in connexion with the Assyrian Pantheon.


² The city, of which the name is written    or    , and which was the capital of the Hittites, and the chief place apparently in Syria, must represent, it would seem, either Baalbek, or Damascus, or Jerusalem; but I have not yet been able to satisfy myself to which place the notices in the Inscriptions are most applicable, nor, owing to the strangely contradictory employment of the character , can I determine with any certainty the true form of the name.

Hamath, and the twelve kings of the tribes who were in alliance with them¹, came forth arraying their forces against me. They met me, and we fought a battle in which I defeated them, making prisoners of their leaders, and their captains, and their men of war, and putting them in chains.

"In the eleventh year, I went out from the city of Nineveh, and for the ninth time crossed the Euphrates. I took the eighty-seven cities belonging to Ara-lura, and one hundred cities belonging to Arama, and I gave them up to pillage. I settled the country of Khamána, and passing by the country of Yeri, I went down to the cities of Hamath, and took the city of Esdimak, and eighty-nine of the dependent towns, slaying the wicked ones and carrying off the treasures. Again, Hem-ithra, king of Atesh, Arhulena, king of Hamath, and the twelve kings of the tribes, (or in one copy, the twelve kings of the Sheta) who were in alliance with them, came forth, levying war upon me; they arrayed their forces against me. I fought with them and defeated them, slaying 10,000 of their men, and carrying into slavery their captains, and leaders, and men of war. Afterwards I went up to the city of Habbartil, one of the chief cities belonging to Arama (of Ararat,) and there I received the tribute of Berbaranda, the king of Shetina, gold, silver, horses, sheep and oxen, &c., &c.² I then went up to the country of Khamána, where I founded palaces and cities.

"In the twelfth year, I marched forth from Nineveh, and for the tenth time I crossed the Euphrates, and went up to the city of Sevarra-

¹ I have sometimes thought that the twelve tribes who are confounded with the Hittites, and who confederate with the kings of Atesh and Hamath against the Assyrians, might represent the children of Israel, but such an identification can be at present but a mere conjecture. In one passage they are spoken of, I think, as "the twelve tribes of the Upper and Lower country;" (the word that I translate "Upper" being the epithet applied to the Upper Zab, which is crossed on the march from Nineveh to Media;) and if accordingly the Jews should be the people indicated, the notice must be supposed to refer to them soon after their arrival in Palestine, from "the Upper and Lower country" of Egypt, a somewhat greater antiquity being thus given to the Inscriptions of Nimrud than I should be otherwise disposed to claim for them.

² This tribute is represented in the fifth row of sculptures upon the Obelisk. Perhaps the true reading of the name of the tribe is the *Sevtina* or *Sebtina*, for as the letter  represents the *s* and *b* indifferently, the inference is that it must have originally possessed the full syllabic power of *Seb*. I conjecture the *Sevtina*, who are very frequently spoken of in the early Assyrian Inscriptions, but rarely or ever in the later, to be the *Shairutena* of the Hieroglyphs. They inhabited some parts of Syria, but I have no clue to their particular emplacement.

huben. I slew the wicked and carried off the treasures from thence to my own country.

"In the thirteenth year, I descended to the plains dependent on the city of Assar-animet. I went to the district of Yáta. I took the forts of the country of Yáta, slaying the evil-disposed and carrying off all the wealth of the country.

"In the fourteenth year, I raised the country and assembled a great army; with 120,000 warriors I crossed the Euphrates. Then it came to pass, that Hem-ithra, king of Atesh, and Arhulena, king of Hamath, and the twelve kings of the tribes of the upper and lower country, collected their forces together, and came before me offering battle. I engaged with them and defeated them; their leaders, and captains, and men of war I cast into chains.



"In the fifteenth year, I went to the country of Nahiri, and established my authority throughout the country about the head streams which form the Tigris. In the district of Akhlábi I celebrated (some great religious ceremony, probably, which is obscurely described, and which I am quite unable to render).

"Afterwards I descended to the plains of Lanbuna, and devastated the cities of Arama, king of Ararat¹, and all the country about the head waters of the Euphrates; and I abode in the country about the rivers which form the Euphrates, and there I set up altars to the supreme gods, and left priests in the land to superintend the worship. Hasá, king of Dayini², there paid me his homage and brought in his tribute of horses, and I established the authority of my empire throughout the land dependent on his city.

"In the sixteenth year, I crossed the river Zab, and went against the country of the Arians³. Sut-mesitek, the king of the Arians, I put

¹ I may here notice, once for all, that there is no doubt whatever about the reading of Ararat, nor its identity with Armenia; for both at Nakhsh-i-Rustam and Behistun, the Persian Armina is represented in the Babylonian translation by Hararat, written nearly in the same manner as at Khorsabad. I have added this note as the sheets are passing through the press, in consequence of remarking that Dr. Hincks has mistaken the name of Ararat for that of Chorasmin.

² I conjecture the Dayini or Dayani to be the Tahia of the Hieroglyphs, Scriptural נִיַּיִם, and Δάοι of Herodotus, Lib. i. c. 125.

³ The identification of the   with the Arians (or Ἀριοί, whom Herodotus mentions as the ancient inhabitants of Media, Lib. vii. c. 62) is very doubtful. The people mentioned in the Inscriptions, however, evidently dwelt within the mountain range east of Assyria, and were neighbours of the Medes. The name seems to have been become obsolete at the Khorsabad period of history.

in chains, and I brought his wives, and his warriors, and his gods, captives to my country of Assyria; and I appointed Yanvu, the son of Khanab, to be king over the country in his place.

"In the seventeenth year, I crossed the Euphrates and went up to the country of Khamána, where I founded palaces and cities.

"In the eighteenth year, for the sixteenth time I crossed the Euphrates. Khazakan of Atesh came forth to fight; 1121 of his captains, and 460 of his superior chiefs, with the troops they commanded, I defeated in this war.

[It was to commemorate this campaign, that the Colossal Bulls found in the centre of the Mound at Nimrud, were set up. The inscription upon them recording the wars, is of course far more detailed than the brief summary on the Obelisk, and I may as well therefore give my reading of it.

It commences with a geographical catalogue. "The upper and lower countries of Nahiri, the extensive land which worshipped the god Husi, Khamána and the Sheta, the countries along the course of the Tigris, and the countries watered by the Euphrates, from Belats to Shakni, from Shakni to Meluda, from Meluda to Dayáni, from Dayáni to Arzeskán, from Arzeskán to Latsán, from Latsán to Hubiska; the Arians and the tribes of the Chaldees who dwell upon the sea-coast.

"In the eighteenth year, for the sixteenth time I crossed the Euphrates. Then Khazakan of Atesh collected his warriors and came forth; these warriors he committed to a man of Aranersa, who had administered the country of Lemnan. Him he appointed chief of his army. I engaged with him and defeated him, slaying and carrying into slavery 13,000 of his fighting men, and making prisoners 1121 of his captains, and 460 superior officers, with their cohorts."

I now return to the Obelisk.]

"In the nineteenth year, for the eighteenth time I crossed the Euphrates. I went up again to Khamána, and founded more palaces and temples.

"In the twentieth year, for the twentieth time I crossed the Euphrates. I went up to the country of Beráhui. I took the cities, and despoiled them of their treasures.

"In the twenty-first year, for the twentieth time I crossed the Euphrates, and again went up to the country of Khazakan of Atesh. I occupied his territory, and while there received tribute from the countries of Tyre, of Sidon, and of Gubal'.

¹ Gubal is the Greek Βούβλος. The form of 𐤂𐤁𐤏 occurs in several passages of Scripture, (see Ezek. xxvii. 9, and 1 Kings v. 32); and the same orthography

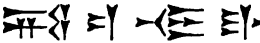
"In the twenty-second year, for the twenty-first time I crossed the Euphrates and marched to the country of Tubal¹. Then I received the submission of the twenty-four kings of Tubal, and I went on to the country of Atta, to the gold country, to Belui, and to Ta-Esferem².

"In the twenty-third year, I again crossed the Euphrates and occupied the city of Huidara, the strong-hold of Ellal of Meluda; and the kings of Tubal again came in to me and I received their tribute.

"In the twenty-fourth year, I crossed the river Zab, and passing away from the land of Kharkhar³, went up to the country of the Arians. Yanvu, whom I had made king of the Arians, had thrown off his allegiance, so I put him in chains. I captured the city of Esaksha and took Beth Telabon, Beth Everek, and Beth Tsida, his principal cities. I slew the evil-disposed, and plundered the treasures, and gave the cities over to pillage. I then went out from the land of the Arians, and received the tribute of the twenty-seven kings of the Persians. Afterwards I removed from the land of the Persians and entered the territory of the Medes, going on to Ratsir and Kharkhar; I occupied the several cities of Kákhidra, of Tarzánem, of Irleban, of Akhirablud, and the towns which depended on them. I punished the evil-disposed. I confiscated the treasures and gave the cities over to

was retained until a late period upon the coins of the city. See the Duc de Luynes's Essay, "*Sur la Numismatique de la Phénicie*," p. 88, *sqq.*

¹ The Syrian tribe of Tubal, connected, in all probability, if not identical with the תבול or תובל of Scripture, will be more particularly noticed in my remarks on the Khorsabad Inscriptions.




² I have ventured to read  phonetically, as it here certainly represents the name of a country; but the term, which is of very common occurrence, usually denotes some well-known natural object, (perhaps a palm-tree,) and the initial character is determinative. The same word, I may add, is used to designate a city of Babylon in the E. I. H. Insc., col. iv. l. 27.

³ The land of Kharkhar, which is very frequently mentioned in the Inscriptions of Nimrud, of Khorsabad, and of Van, was certainly a part of Armenia. There are two people known in Armenian history whose names nearly resemble the Cuneiform title, the Karkarians (*Γαρκαρίεις* of Strabo), and the Khorkhorunians, descended from Khorh, son of Haig. The latter, however, who dwelt upon the lake Van, and were of much traditional celebrity, have certainly the best claim to be identified with the Cuneiform Kharkhar (see St. Martin's Armenia, vol. II. p. 246). The siege of the city of Kharkhar, capital of the province, is represented in the Khorsabad sculptures, Salle II. No. 7; and this may possibly be the same place as the modern city of Van, for the hill on which the castle is built retains the name of Khorkhor to the present day: though as the Kharkhar, which is mentioned in the Inscriptions on the Van rock, appears to be a foreign place, the mere coincidence of name is by no means sufficient to prove an identity.

pillage, and I established the authority of my empire in the city of Kharkhar. Yanvu, the son of Khaban (usually written Khanab), with his wives and his gods, and his sons and daughters, his servants and all his property, I carried away captive into my country of Assyria¹.

"In the twenty-fifth year, I crossed the Euphrates and received the tribute of the kings of the Sheta. I passed by the country of Khamána and came to the cities of Akti of Berhui. The city of Tabura, his strong-hold, I took by assault. I slew those who resisted and plundered the treasures; and all the cities of the country I gave over to pillage. Afterwards in the city of Bahura, the capital city of Aram, son of Hagus, I dedicated a temple to the god Rimmon, and I also built a royal palace in the same place.

"In the twenty-sixth year, for the seventh time I passed through the country of Khamána. I went on to the cities of Akti of Berhui, and I inhabited the city of Tanaken, which was the strong-hold of Etlak²; there I performed the rites which belong to the worship of Assarac, the supreme god; and I received as tribute from the country, gold and silver, and corn, and sheep, and oxen. Then I went out from the city of Tanaken, and I came to the country of Leman. The people resisted me, but I subdued the country by force. I took the cities and slew their defenders; and the wealth of the people, with their cattle and corn and moveables, I sent as booty to my country of Assyria. I gave all their cities over to pillage. Then I went on to the country of Methets, where the people paid their homage, and I received gold and silver as their tribute. I appointed Akharriyadon,







¹ I infer, from the geographical distribution contained in this paragraph, that the Persian tribes, when they were thus first brought in contact with the Assyrians, had not yet turned to the southward in their immigration from beyond the Oxus, or, at any rate, had not yet reached Persia Proper. The    or Arians, who were first met with after the passage of the Zab, inhabited probably Central Media. The Persian tribes I should place about Rhages and the Caspian Straits (the date of the Nimrud Inscriptions being thus apparently synchronous with the composition of the first Fargard of the Vendidad). The Medes might then be understood as the inhabitants of Atropatene, and Kharkhar would be Pers-armenia. I do not of course give these emplacements as certain, but it would be difficult, according to any other explanation, to bring the tribes and countries indicated into geographical relation. I may add that it is, I think, undoubtedly in allusion to the Kharkhar of the Inscriptions, that Alexander Polyhistor, quoting Berosus, says of the ark or vessel in which Xisuthirus escaped from the flood, *ἐν μίρῳ τῇ ἐν τοῖς Κορυβαίων ὄρεσι τῆς Ἀρμενίας διαμένειν*. Syncell. Chron. 28; Eus. Chron. 5. 8.

the son of Akti, to be king over them. Afterwards I went up to Khamána, where I founded more palaces and temples; until at length I returned to my country of Assyria.

"In the twenty-seventh year, I assembled the captains of my army, and I sent Detarasar of Ittána, the general of the forces, in command of my warriors to Armenia; he proceeded to the land of Khamána, and in the plains belonging to the city of Ambaret, he crossed the river Artseni¹. Asiduri of Armenia, hearing of the invasion, collected his cohorts and came forth against my troops, offering them battle; my forces engaged with him and defeated him, and the country at once submitted to my authority.

"In the twenty-eighth year, whilst I was residing in the city of Calah, a revolt took place on the part of the tribes of the Shetina. They were led on by Sherrila, who had succeeded to the throne on the death of Labarni, the former king. Then I ordered the general of my army, Detarasar of Ittána, to march with my cohorts and all my troops against the rebels. Detarasar accordingly crossed the Upper Euphrates, and marching into the country established himself in the capital city, Kanalá. Then Sherrila, who was seated on the throne, by the help of the great god Assarac, I obtained possession of his person, and his officers, and the chiefs of the tribes of the Shetina who had thrown off their allegiance and revolted against me, together with the sons of Sharila, and the men who administered affairs, and imprisoned or punished all of them; and I appointed Ar-hasit of Sirzakisba to be king over the entire land. I exacted a great tribute also from the land, consisting of gold and silver and precious stones, and ebony, &c., &c., &c.; and I established the national worship throughout the land, making a great sacrifice in the capital city of Kanalá, in the temple which had been there raised to the gods.

"In the twenty-ninth year, I assembled my warriors and captains, and I ascended with them to the country of the Lck. I ac-

¹ If the name here written     be really Khamána (and as the  and  commonly interchange, I can hardly doubt the identity), we must give a somewhat greater extension to the country indicated than I have before proposed. We must consider Khamána, indeed, not only to apply to the true 'Αμάνος, but to include a part of Taurus; for the river Artseni, crossed on the march from Assyria to Ararat, or "the Great Armenia," can only be the 'Αρσένιος of the Greeks (modern آرسناس); and Ambaret, or perhaps Akberet, I should suppose to be the Armenian Kharbert, or, as it is usually called, Kharpoot.




cepted the homage of the cities of the land, and I then went on to Shenába.

"In the thirtieth year, whilst I was still residing in the city of Calah, I summoned Detarasar, the general of my army, and I sent him forth to war in command of my cohorts and forces. He crossed the river Zab, and first came to the cities of Hubiska; he received the tribute of Daten of Hubiska; and he went out from thence and came to the country belonging to Mekadul of Melakari, where tribute was duly paid. Leaving the cities of Melakari, he then went on to the country of Huelka of Minni. Huelka of Minni had thrown off his allegiance and declared himself independent, establishing his seat of government in the city of Tsiharta. My general therefore put him in chains, and carried off his flocks and herds and all his property, and gave his cities over to pillage. Passing out from the country of Minni he next came to the territory of Selshen of Kharta; he took possession of the city of Maharsar, the capital of the country, and of all the towns which depended on it; and Selshen and his sons he made prisoners and sent to his country, despatching to me their tribute of horses, male and female. He then went into the country of Sardera, and received the tribute of Artaheri of Sardera; he afterwards marched to Persia and obtained the tribute of the kings of the Persians; and he captured many more cities between Persia and Assyria, and he brought all their riches and treasures with him to Assyria.

"In the thirty-first year, a second time, whilst I abode in the city of Calah, occupied in the worship of the gods Assarac, Hem, and Nebo, I summoned the general of my army, Detarasar of Itána, and I sent him forth to war in command of my troops and cohorts. He went out accordingly, in the first place, to the territories of Daten of Hubiska, and received his tribute; then he proceeded to Enseri, the capital city of the country of Bazatsera, and he occupied the city of Anseri, and the thirty-six other towns of the country of Bazatsera; he continued his march to the land of Armenia, and he gave over to pillage fifty cities belonging to that territory. He afterwards proceeded to Ladsán, and received the tribute of Hubu of Ladsán, and of the districts of Minni, of Bariana, of Kharran, of Sharrum, of Andi, (and another district of which the name is lost), sheep, oxen, and horses, male and female. Afterwards he went on to a district (of which the name is lost), and he gave up to pillage the cities Biaria and Sitiburia, cities of consideration, together with the twenty-two towns which were attached to them. And he afterwards penetrated as far as the land of the Persians, taking possession of the cities of

Baiset, Shel Khamána, and Akori-Khamána, all of them places of strength, and of the twenty-three towns which depended on them; he slew those who resisted, and he carried off the wealth of the cities. And he afterwards moved to the country of the Arians, where by the help of the gods Assarac and Sut, he captured their cities and continued his march to the country of Kharets, taking and despoiling 250 towns; until at length he descended into the plains of Eames, above the country of Umen¹."

(It is extremely difficult to distinguish throughout these last two paragraphs between the 1st and 3rd persons. In fact, the grammatical prefixes which mark the persons are frequently put one for the other even in the same sentence. From the opening clause of the para-

¹ I will not pretend at present to discuss the geography of either of these two last campaigns; for though many of the names, such as Hubiska, Bazatsera, otherwise Mekhatseri, Ladsán, &c., are well known in the Inscriptions, I have not been able to discover anything certain with regard to their positions, further than that they were contiguous to Northern Media and Armenia. The province of Minni, however, which is mentioned in the campaign of the thirtieth year, and which occupies a conspicuous place in the Inscriptions both of Khorsabad and Van (the name being written indifferently as  and ) is certainly the מִנִּי of Scripture, associated by Jeremiah (c. li. v. 27) with Ararat and Ashchenaz, and also spoken of by Nicolaus of Damascus under the form of Μιννάς. I may also hazard a conjecture that the אֲשְׁכֶנַז Ashkenaz of Scripture is the Arzeskan of the Inscriptions, which was the capital city of Arama, king of Ararat, the two names being almost identical, if we admit a metathesis in the orthography. Ashkenaz must at any rate necessarily have some Cuneiform correspondent, and I know of no name but Arzeskan that at all resembles it. The similarity of the Arama  of the Inscriptions with the Armenian king Aram, sixth in descent from Haig, cannot of course be overlooked; but I would hardly propose to draw any historical inference from this coincidence of name. I will only add that the notice of the Persians in both of these campaigns, in evident connection with tribes and countries belonging to Northern Media and Armenia, is to my mind strongly confirmatory of the supposition that at the date of the Nimrud Inscriptions the tribes in question were still encamped at the foot of the mountains south of the Caspian, in those seats which the traditions of the race identified with the exploits of Feridoun and his successors. I believe indeed that these Cuneiform notices of the Persians will go far to verify the suspicion which has been long entertained, of the subjection of the race to the Assyrian yoke being figured under the tyrannical rule of the usurper Zohák, and will enable us in the end to introduce something like chronological accuracy and order into the myths and traditions embodied in the Shah-námeh.

graphs, & certainly understand that the Assyrian general conducted both of these expeditions into High Asia; yet, it would seem as if the king in chronicling the war, wished to appropriate the achievements to himself.)

















It remains that I should notice the Epigraphs which are engraved on the Obelisk above the five series of figures. These epigraphs contain a sort of register of the tribute sent in by five different nations to the Assyrian king; but they do not follow the series of offerings as they are represented in the sculpture with any approach to exactitude.

The first epigraph records the receipt of the tribute from Shehuá of Ladsán, a country which joined Armenia, and which I presume, therefore, to be connected with the Lazi and Lazistán.

The second line of offerings are said to have been sent by Yahua, son of Hubiri, a prince of whom there is no mention in the annals, and whose native country therefore I am ignorant.

This is followed by the tribute of a country which is called Misr, and which there are good grounds for supposing to be Egypt, inasmuch as we are sure from the numerous indications afforded to the position in the Inscriptions of Khorsabad, that Misr adjoined Syria, and as the same name, (that is, a name pronounced in the same manner, though written with different phonetic characters,) is given at Behistun as the Babylonian equivalent of the Persian *Mudráya*¹. Misr is not once mentioned in the Obelisk annals, and it may be presumed, therefore, to have remained in complete subjection to Assyria during the whole of Temen-bar's reign.

The fourth tribute is that of Sut-pal-adan, of the country of Shekhi, probably a Babylonian or Elymæan prince, who is not otherwise mentioned; and the series is closed by the tribute of Barberanda,

¹ The Misr of Behistun and Nakhsh-i-Rustam, answering to *Mudráya*, is written   , whilst the name occurs under a variety of forms in the Inscriptions of Assyria, the first character being    or  , equal to *m* or *v*; the second,   , or   equal to *s*; and the third, uniformly   or *r*. There can be little doubt therefore, I think, about the identity of the names; and the geographical indications of the Khorsabad Inscriptions are applicable to Egypt, and to Egypt only. As the name of , by which the Jews designated Egypt, was unknown in the country itself, it is highly interesting to find that it was in use amongst the Assyrians, at as early a period as the Nimrud sculptures.




the Shetina, a Syrian tribe, which I rather think is the same as the Sharutana of the hieroglyphic writing.

I cannot pretend, at present, to identify the various articles which are named in these epigraphs; gold and silver, pearls and gems, ebony and ivory, may be made out, I think, with more or less certainty; but I cannot conjecture the nature of many other of the offerings; they may be rare woods, or aromatic gums, or metals, or even such articles as glass^{*} or porcelain.

With regard to the animals, those alone which I can certainly identify are horses and camels, the latter being, I think, described as "beasts of the desert with the double back".

I do not think any of the remarkable animals, such as the elephant, the wild bull, the unicorn, the antelope, and the monkeys and baboons, are specified in the epigraphs; but it is possible they may be spoken of as rare animals from the river of Arki and the country beyond the sea.

I have now finished my general sketch of the Obelisk Inscription. There are several fragments attaching to bas-reliefs in the centre palace of Nimrud, which probably record further exploits of Temenbar's reign,—but I have not yet met with the king's name upon any of them; and the expeditions of all the Assyrian kings were so very similar, not only in the countries attacked, and in the conduct of the campaigns, but even in respect to the phraseology employed to describe the wars, that without the direct proof of identity afforded by proper

¹ Dr. Hincks has declared this explanation to be quite untenable, and I am not prepared myself to support it very warmly. As the term , however, denotes ordinarily some natural feature, whilst preceded by the determinative , it represents "a camel," it is certainly most reasonable to explain the connexion between the two meanings by supposing the camel to be the beast especially belonging to that natural feature; and if this be admitted, "desert" will assuredly be a more suitable reading for  than "forest." There would be no impropriety also in connecting the desert with Lebanon, especially where, as in line 8 of the Nimrud Standard Inscription, a great territorial boundary is indicated, for a phrase of very similar structure and application occurs in the fourth verse of the first chapter of Joshua:—"From the wilderness and this Lebanon, even unto the great river, the river Euphrates." At the same time I fully admit the force of Dr. Hincks's observations, which I have just read in page 68 of his Paper on the Khorsabad Inscriptions; and I bear a most willing testimony to the great sagacity which he has brought to bear on this and many other points connected with the Cuneiform Inscriptions, and which very frequently has rendered him independent of data.





names, it is never safe to assume the king to whom the annals may belong.

Of the son and grandson of Temen-bar II., little is known beside the names. The name of the one is compounded of the titles of the two gods, Hasi or Shemir, and Hem; and thus, although generally written Hasi-he, it may also read Shemir-hem, which certainly sounds very like the Greek Semiramis. The other is named Hevenk, like the grandfather of Sardanapalus, and it is to this king, Hevenk (or Evechius) II., that we are indebted for the genealogical tree which carries up the ancestry of the family, at any rate to Temen-bar I., and which contains a passage that may possibly name Beltakat, the twentieth in ascent, who first instituted the Assyrian monarchy¹.

With Hevenk II. terminates the series of kings immediately connected with Sardanapalus. Owing to domestic troubles or to foreign invasion, there appears after this king to have been an interruption of the royal line; and in the interval which elapsed before the succession was restored, a very considerable change may be shown to have taken place in the manners and customs of the inhabitants of the country. So complete, indeed, does the social revolution appear to Mr. Layard, that he conjectures a new race to have peopled the country, or at any rate, a new dynasty with a new religion to have acquired the kingdom. On this point, however, I am not altogether of Mr. Layard's opinion. I am willing to admit an interregnum; and I think it even probable, as the king who restored the empire is entirely silent on the subject of his genealogy, that he was not a member of the old imperial family in the line of direct descent; but at the same time, I feel pretty certain, that no very long period of time could have elapsed between Evechius II. and the builder of Khorsabad. The titles employed by the latter, although unused by Sardanapalus, are to be found in the genealogical inscription of Hevenk II.²; the language, also, of the inscriptions of Nimrud and Khorsabad is absolutely identical; not only, too, were the same gods worshipped by the restored as by the old dynasty, but the gods were grouped in the same combinations³;

¹ See British Museum series, Pl. 70, l. 25. There is no certain genealogy in this Inscription above Temen-bar II., for although four other royal names are mentioned, it is extremely doubtful how they may be connected.

² I refer to the title "king of Sabiri and Shehak," which is found line 21 of the Inscription in question, applied to Katibar, who was also king of Assyria.







³ I observe, however, that the worship of Ashteroth ( or   , *Ashteta*), seems to have been introduced into Assyria during this interval; for the name, although of very frequent occurrence in the

and furthermore, we have evidence that the Khorsabad king actually inhabited the north-west Palace of Nimrud, two of his inscriptions having been found there which record how he repaired the great palace of Halah, originally built by Sardanapalus, "who (as I doubtfully read the legend) was the fourth in ascent from me".

If this reading should in the sequel prove to be correct, all uncertainty with regard to the relative chronology will be removed, for Hevenk II., Husi-hem, and Temen-bar II., will exactly fill up the interval indicated between the Khorsabad king and Sardanapalus, and it will thus be shown that notwithstanding the interregnum, the line was considered to have been kept on in a continuous succession.

I have particularly noticed this apparent connexion of the two dynasties, as the impression appears to be pretty general, that whatever may be the antiquity allowed to the Nimrud series of kings, the line commencing with the builder of Khorsabad must at any rate represent what is usually termed the lower dynasty of Assyria, that is, the monarchs mentioned in Scripture, who were contemporary with the kings of Israel and Judah. Now in a question of this sort, with the limited and intractable materials that are alone available to our research, certainty is impossible. Positiveness must of itself create suspicion, for it is a proof that the subject cannot have been thoroughly investigated. I would not pretend for my own part to pronounce authoritatively, that the kings of the lower or restored dynasty of Assyria were, or were not, the royal line mentioned in Scripture. My opinion at present is, I confess, against the identification, but the evidence is pretty nearly balanced, and if the great difficulty, the dissimilarity of names, were removed, I might possibly become a convert to the belief that in the three kings, who built the Palace of

Inscriptions of Khorsabad, is never once met with in the earlier annals of Nimrud. The term *Ashtera*, however, is often used simply for a goddess, as in the phrase, "the gods and goddesses inhabiting Assyria." See Khorsabad Plates, No. 131, ls. 8 and 20, &c.






¹ See British Museum series, Pl. 33, l. 13. As the characters  and  interchange in the name of the Euphrates, and as the former is often used after a king's name, apparently as a title or epithet, I believe I must abandon the idea of their representing "third" and "fourth" in the two passages where they refer respectively to Temen-bar I. and Sardanapalus. That     however signifies "an ancestor" or "one going before," I consider to be almost certain, not only from a very similar expression at Behistun, but from the occurrence of the phrase in several inscriptions at Khorsabad, where the context proves the sense; compare amongst others, line 8 of Pl. 153, and see British Museum series, Pl. 76, ls. 22 and 23.


















Khorsabad, who founded Mespila, and who constructed the lions in the south-west Palace of Nimrud, we had the Biblical Shalmaneser, Sennacherib, and Esarhaddon.

This subject is of so much interest, that before running over the general contents of the inscriptions of the different kings, I will give the heads of the argument both for and against the identification.

Firstly then with regard to Shalmaneser: the Sargon of Isaiah, who sent his general, Tartan, against Ashdod, at the commencement apparently of the reign of Hoshea, king of Israel, is almost certainly the same king who is usually named Shalmaneser¹; it may be supposed, therefore, that the king bore these two names indifferently. Now I do not think that the Assyrian name of the Khorsabad king will read phonetically, either Sargon or Shalmaneser, but it may be made to assimilate with the former name, inasmuch as the first element of it denotes "a king," to which amongst other words, *Sar* answers in Chaldee²; and the second element, which reads *tsin* or *du*, interchanges in other names with *kon*³, leading to the inference that



¹ Compare Isaiah xx. 1 with 2 Kings xviii. 17.

² The first element of the name is  (which is the Assyrian form of the Babylonian ) or <<, these characters being abbreviations or monograms for the word "king." I have already mentioned that the word of which  is the abbreviation, is written at Behistun at full length as *arkau* or *arko*; but I am in great doubt whether << should be made to assimilate with this title, or whether it may not stand for Melik. The word  properly signifies merely "a prince," but as the root  has the general sense of "ruling" or "having dominion," we may reasonably suppose a derivative from it to be applied to "a king" or "supreme ruler."

³ It is with some doubt that I render the term   by *tsin*. This reading, indeed, depends on the character  being the same as  or , and although the one form is certainly often interchanged with the other, I am by no means assured of their identity. For an instance of the interchange of  with   see the name of the Chaldean king at Khorsabad, which occurring as it does in almost every inscription, is written indifferently   and   . It has sometimes occurred to me that the Khorsabad king's name is to be found in the *Ἀνακυνδαπένης* of the Greeks.   , might very well be made to read *Ἀνακυν*, and *δαπένης* greatly resembles , *drukhs*, although the union of Assyrian and Zend is somewhat incongruous.





tsin, *du*, and *kon*, were synonyms, which might be optionally employed. As a further argument, also, that the popular name of the Khorsabad king was really Sargon, I must repeat the observation which I have already made in treating of the nomenclature of the ruins; namely, that the city excavated by M. Botta is stated in the inscriptions to have borne the same name as its founder¹, and that as late as the Arab conquest the site of Khorsabad actually retained in the country, the old Syrian title of Sarghun.

This similarity of name, however, is perhaps the least striking of the coincidences between the Khorsabad king and the Shalmaneser of history. Shalmaneser we know attacked Hoshea, because he was in communication with Sabaco, king of Egypt. The king of Egypt mentioned in the Khorsabad Inscriptions, dating perhaps five years earlier, is Biarka or Biarku, a title which somewhat resembles that of Bocchoris, the king whom Sabaco dethroned. We further learn from Josephus, quoting from Menander, that Shalmaneser sent a force to Cyprus to assist the islanders against Tyre²; and it is thus highly interesting to find that an inscription which has lately been discovered in the island of Cyprus, and which appears to commemorate the liberation of the islanders, belongs to the king of Assyria, who is known as the builder of Khorsabad³. An expedition against Ashdod is described at Khorsabad, which may very well be that noticed in Isaiah, and the king always names Ashdod among his tributary cities, whilst Tyre and Sidon are excluded from the list, in accordance apparently with the testimony of Menander, that Tyre successfully resisted Shalmaneser's five years' siege. Among the countries overrun by the Khorsabad king we also find in one inscription the name of Yehuda⁴, in connexion with that of Hamath, and although without further evidence I would not venture for my own part to identify the geographical position, I can well understand that a sanguine inter-

¹ That is, it is the name of the king, preceded by a noun of locality. This noun is written , and from its interchanging with , (see British Museum series, Pl. 44, 18th variant,) it may be conjectured to have the phonetic value of *amen*. In use, however, it is equivalent to the Beth, Tel, Hazar, Kefer, Kiriath, &c., used in Arabic and Hebrew geography.

² See Cory's *Fragments*, p. 199.

³ I examined this Inscription a short time back in the Museum at Berlin, and I have since received a very perfect paper cast of it, through the kindness of Dr. Olfers. It is very similar to the Standard Inscription of Khorsabad, but contains a brief local notice of much interest.

⁴ See British Museum series, No. 33, l. 8. The name is written    .

preter would be disposed to fasten on the passage as a notice of the conquest of Samaria.

I now go on to the next king, the builder of the great palace of Koyunjik, and the son of the king at Khorsabad, whose actions, it must be admitted, have a good deal of resemblance to those of Sargon or Shalmaneser. Of course if the father be Shalmaneser the son will be Sennacherib, and it has been lately stated by a scholar, Dr. Hincks, who has made considerable progress in decyphering the Assyrian inscriptions, that the Cuneiform orthography actually gives that name. I cannot, however, I confess, persuade myself of the possibility of such a reading. In some of the many forms which the name takes the two last letters are *r* and *m*, and the initial monogram may have the power of *s*, but there is no other resemblance. The first element of the name is the god *Bel*,—this I consider to be certain; the second element I read doubtfully *adonim*, and the third is sometimes written *sa* or *sha*, and sometimes *rim*, these two words being probably synonyms¹. If, therefore, this king be really the Sennacherib of sacred

I proceed to give a brief analysis of this name. The first element is either >| <<< or >| >|| <>||, that is, it is the name of the god who was represented by either one or the other of these groups, and that god was undoubtedly בל or Belus; for the monogram >|||, which is a contraction of >| >||, is used at Behistun for the last syllable of the name of Naditabir, and >||, moreover, denoting simply a lord or master, like the Hebrew בצל, is replaced in the Khorsabad Inscriptions by the forms of >| >=|, >| >=||, or >| <<>||, all of which give the sound *Bel*, and by the fuller form of >|| >=|| <<>|=||| or *Bil*, upon Bellino's Cylinder. My own belief is, that >|| is a simple *b*, and is used by abbreviation for *Bel*, both as the name of the god, and to express the word "lord." The character <>|| invariably joined to the >|| in Assyrian, and usually in Babylonian (but not always—compare the names of the witnesses to the contracts published by Grotefend, which mean "the servant of Bel," "given by Bel," "devoted to Bel," &c.), is phonetically an *i*, and is thus either used to complete the phonetic expression of the name, or, as I think more probable, to distinguish the male deity >|| <>|| Belus, from the female Beltis, or >|| >=|||. I am not sure of the phonetic power of <<< in Babylonian. Curiously enough, in Median it does, I think, actually represent *s-n*, but it would seem to be a simple *b* or *b-s* in the other alphabet; for the groups >=|| <|-| |,

and profane history, we must believe the name, in its popular and phonetic form, to be as yet undiscovered. The few records, at the same time, of the Koyunjik king, that have been as yet alone found, coincide in some degree with our historical notices of Sennacherib. On the great tablet at Bavian the Koyunjik king records his conquest of Babylon, which agrees sufficiently well with the statement of Abydenus and Alexander Polyhistor that Sennacherib thus inaugurated his reign¹. In an inscription upon one of the bulls at Koyunjik

𐎶𐎶 𐎶𐎶 and 𐎶𐎶 𐎶𐎶 are phonetically identical, and at Khorsabad, in Pl. 80, l. 7, 𐎶𐎶 is used for the initial character of the name of Media.

The second element of the name I am considering is 𐎶𐎶 or 𐎶𐎶𐎶 𐎶𐎶, and I do not pretend to have any satisfactory grounds for reading it as *adonim*. The 𐎶𐎶 or 𐎶𐎶 has, however, I think, almost certainly the phonetic value of *m* or *v*, and I have spoken of the other characters in my note on the name of Sardanapalus.

The third element is 𐎶𐎶 or 𐎶𐎶 𐎶𐎶, and, either as ideographs or phonetic groups, both these terms are strange to me; the latter group, however, has certainly the power of *r-b*, and would thus answer well enough for the concluding syllable of the name of Sennacherib.

Since writing the above, I have received Dr. Hincks's paper on the Khorsabad Inscriptions, and have attentively read his remarks on the presumed name of Sennacherib, contained in pages 25 and 35. I am bound to say that I can discover no authority whatever for reading 𐎶𐎶 or 𐎶𐎶 as *sen*, beyond the clue afforded by the value of the character in Median, and in this case I certainly think that clue fallacious. I must further add, with all due deference to Dr. Hincks's happy talent of solving enigmas almost by intuition, that 𐎶𐎶 or 𐎶𐎶 is not *ci-na*, but *Bel* (the *n* being substituted for *l*, as usual); that 𐎶𐎶𐎶 is not *θā* in Median, but *sar*, being in fact the Assyrian 𐎶𐎶𐎶 and Babylonian 𐎶𐎶𐎶; that "from" in Median is simply 𐎶𐎶𐎶, the preceding 𐎶𐎶𐎶 𐎶𐎶 being the case inflexion, answering to the Turkish *ne'ig*; that 𐎶𐎶 has in Babylonian the power of *m* rather than of *gi*, and that I believe the plural sign 𐎶𐎶𐎶 to have a similar phonetic value of *im*, though the *m* probably lapses before a following *n*. After reading, indeed, and carefully considering all Dr. Hincks's arguments, I remain as incredulous as ever of the identity of the Koyunjik king with the Sennacherib of Scripture.

¹ See Cory's *Fragments*, pp. 6, 16, 83.

There is also a notice of this king's conquest of Sidon, and the name of the monarch who was conquered may perhaps be read as Ithobal¹.

It would seem highly probable that it was upon the same expedition into Phœnicia that the triumphal tablet was engraved at the Nahar el Kalb, and as the Assyrian monarch has there apparently retorted upon Egypt the boast of foreign conquest, the circumstances would seem particularly applicable to the great expedition of Sennacherib, which is alluded to both in Holy Writ and by Herodotus, and in which Josephus states that the Assyrian king not only took Ashdod and Pelusium, but also ravaged Lower Egypt².

Of the son of this king very little indeed is known from the inscriptions, but the two first elements of his name are identical with those that occur in the name of Sardanapalus, and thus read, according to my phonetic system, Assar-adan, which represents as near as possible the Esarhaddon of Scripture³.

These are the immediate points connected with the inscriptions of the Khorsabad dynasty, which seem to me to be favourable to the identification of the line with the Scriptural kings, Shalmaneser, Sennacherib, and Esarhaddon. The general position which would also lead to the same conclusion, and which of course is that usually put forward, is, that monarchs of such power as those who overran Palestine, and carried the Ten Tribes into captivity, must needs, in a country where sculptured slabs and votive bulls appear to have answered the same purpose as our modern gazettes and bulletins, have left some memorials of their sway,—while, if any such memorials do exist amongst the relics that have lately been disinterred, the inscriptions of Khorsabad and Koyunjik are those alone which will answer.

It is no love of paradox that makes me resist this accumulation of evidence. It is merely that calmness of research which refuses to take up an hypothesis, however tempting, before the arguments which exist against it are either removed or overcome. These arguments I will now briefly enumerate:—

1stly.—The nomenclature. I cannot reconcile it to my under-

¹ See British Museum series, Pl. 61, l. 8. The name of the king of Sidon, much mutilated, and consequently of a very uncertain orthography, is found at the end of line 7 in Pl. 59 of the British Museum series.

² Compare with Josephus, *Ant.*, lib. x. c. 1, the passage in Herodotus, lib. ii. c. 141, and *Isaiah* c. xx. v. 4, where, however, the subjugation of Egypt would seem to be attributed to Sargon or Shalmaneser rather than to Sennacherib.

³ The only inscription known of this king is that published in Pl. 19 of the British Museum series.

standing that names which read Arko-tsin and Bel-adonim-sha denote the two kings Shalmaneser and Sennacherib. The name of the latter king, indeed, is given, without any sensible variation, by the sacred historians, by Herodotus, and by the Chaldee annalists Berosus and Abydenus, and it is to me incredible, or at any rate inexplicable, that a title, which is thus shown to have been so universally known, should have been replaced on the monuments by a perfectly different appellation.

2ndly.—The synchronism of the Khorsabad king with Hoshea, king of Israel, obtained through the notice of Bocchoris, king of Egypt, is by no means to be depended on. We cannot be sure, in the first place, that Biarku is the same name as Bocchoris, written in Egyptian Pe-hur (or, according to Mr. Birch, Bak-har); and even if the names be identical, the allusion will more probably be to Pe-hur or Bak-har, the fifth king of the twenty-first dynasty, than to the Saite Bocchoris of the twenty-fourth dynasty, whose name never occurs in the hieroglyphs, who reigned but a very few years, and who, as an usurper, would hardly have been recognised by the Assyrian monarch as king of Egypt; especially in records which, if the two kings had really been Shalmaneser and Bocchoris, as there was an interval of at least eight years between the war with Egypt and the date of the inscription, must have been engraved several years after the Ethiopian dynasty had succeeded to power¹. According, moreover, to the best Egyptian chronology, Bocchoris, the predecessor of Sabaco, cannot have been upon the throne of Egypt at any period of Shalmaneser's reign².

As far as the campaigns are concerned, I attach no great importance to the coincidences I have noticed, for almost every Assyrian monarch of note warred in Syria, and the conquests, therefore, of Ashdod and Sidon may apply to any king of the dynasty, as well as to Shalmaneser and Sennacherib. Independently of this, there is no notice of the Khorsabad king's siege of Samaria, nor of the Koyunjik king's wars

¹ Bocchoris reigned but six years, according to Manetho; and as the war between Assyria and Egypt is distinctly placed in the seventh year of the Nineveh reign, he could not have been upon the throne when Khorsabad was built, which records events as late as the fifteenth year of the same reign. The date of the Egyptian war is fixed in the No. II. series of the Khorsabad Historical Annals (see Pl. 75). where the events are chronicled according to their yearly order, while the number 15 is found in the phrase "from the commencement of my reign to the 15th year," which heads each section of the annals.

² I state this on the authority of the Chevalier Bunsen, who has kindly allowed me to inspect his MS. Chronological Tables.

with Egypt, events which, if the monarchs recorded were really Shalmaneser and Sennacherib, could hardly fail of being recorded.

These, however, are negative arguments. I will now state what I regard as positive evidence against the identification. There are, in the first place, many records of kings in Assyria, who were certainly later than the builders of Khorsabad and Koyunjik. One of these, whose annals are stamped on a clay cylinder in the British Museum, seems to have warred on fully as great a scale as his predecessors; he describes his conquest of Syria and Phœnicia, of Asia Minor, of Babylonia, of Susiana, of Media¹. A second, whose history is found on a slab at Nimrud brought from some other locality, mentions nearly a hundred cities which he had brought under subjugation to the Assyrian yoke². There are other kings who must be placed in the same category: the monarch recorded on Lord Aberdeen's black stone, and another whose name occurs upon a slab found in the upper debris at Koyunjik. The proof of their being posterior to the son of the Koyunjik king is, in my opinion, almost positive; and if, therefore, the builders of Khorsabad and Koyunjik were really the monarchs mentioned in Scripture, who, I ask, can be the later sovereigns? There could have been no Assyrian king who carried his arms to the vicinity of Palestine, between Esarhaddon and Nebuchadnezzar, and the record, therefore, on the cylinder to which I have alluded, is, to my mind, fatal to the identification of the Khorsabad and Koyunjik kings with Shalmaneser and Sennacherib.

There is still another circumstance, which bears, I think, even more strongly against the identification. The south-west palace of Nimrud, which Mr. Layard somewhat too hastily ascribed to the son of the Koyunjik king, may, it seems to me, be attributed with safety to some monarch belonging to a line distinct from that of the Khorsabad and Koyunjik kings. There is, it is true, a pair of bulls, found in the palace, bearing the name of Assar-adan-assar, who was grandson of the Khorsabad king, and son of the builder of Koyunjik; but this is no proof whatever that Assar-adan-assar was the founder of the edifice. The bulls may very well have been brought from some other locality to ornament the new edifice; and the edifice itself must, I repeat, have been the work of some monarch of a different line, for the greater part of it is constructed of slabs brought from the centre palace of Nimrud; and the annals engraved upon those slabs,—the

¹ See British Museum Series, from 20 to 29 inclusive; and see particularly l. 53 sqq. of Pl. 22 for the proof of posteriority.

² See Plates 17 and 18 of the British Museum series. These inscriptions are described in some detail in their proper places.

annals, be it observed, of the Khorsabad king,—have been intentionally defaced and destroyed by the new architect. Mr. Layard was not aware to what period these annals referred, as the name of the king is wanting, but they are now proved, by their contents, to belong to the builder of Khorsabad; the names of most of his antagonists and tributary kings being found upon them¹. It is not credible that a grandson would have thus desecrated the monuments of his grandfather. Taking into consideration, indeed, the ancestral reverence of the Orientals, I feel persuaded that the wanton destruction of the annals of the Khorsabad king must have been the act of some member of an entirely different family. This family I can only conjecture to have been the lower dynasty of Assyria mentioned in Scripture, and if that be admitted, it will follow as a necessary consequence that Khorsabad and Koyunjik must be referred to the upper and original royal line².

Having thus stated the principal arguments both for and against the identification of the kings of Khorsabad and Koyunjik with the Biblical Shalmaneser and Sennacherib, I venture to observe, that although I am still disposed to assign a much higher antiquity to the restored dynasty of Nineveh, placing the accession of the Khorsabad king at least two centuries before the time of Hoshea and Hezekiah, I would still recommend all parties to refrain from coming to a decision, until fresh elements of inquiry be obtained, either by the discovery of new inscriptions in Assyria, or by a more critical acquaintance with the contents of those that we already possess.

I will now briefly notice the Inscriptions of Khorsabad. They are of four classes:—

First, there is the Standard Inscription, which contains the names and titles of the king, and a list of the principal tribes and nations subject to Assyria; and appended in several instances is a notice of the building of the city of Khorsabad, “near to Nineveh and after

¹ See, amongst others, Biseri of Shaluma and Tarkheler of Tagzema, named in lines 11 and 12 of the British Museum series, Pl. 50, No. 1, both of these chiefs being well known in the Inscriptions of Khorsabad.

² Whilst these pages are passing through the press, I learn from Mr. Layard that he has found the names of two new kings at Nimrud, the son and grandson of the king who dedicated the bulls in the south-western palace; and that in excavating a mound four miles to the north-west of Koyunjik, he has met with two other names, belonging apparently to monarchs posterior to the Khorsabad family. All these discoveries furnish additional arguments for supposing the builders of Khorsabad and Koyunjik to be anterior to the age of Shalmaneser and Sennacherib.


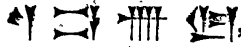
the manner of Egypt," together with a prayer to the gods for its protection.

The Second class consists of the long inscriptions on the Votive Bulls, which, without being strictly historical, go into much greater detail regarding the constitution of the empire, and name the various kings and chieftains subdued by the Assyrian monarch. There are also in these inscriptions very elaborate notices of the Assyrian Pantheon.

The Third, or historical class, consists of the slabs surrounding the sculptured halls, interposing between the bas-reliefs which represent the battles and sieges recorded in the inscriptions. Some of these records are in the form of regular yearly annals, whilst in others the entire history of the monarch's reign is given as a continuous narrative, without being interrupted by divisions of time. Of the latter class of inscriptions, the Hall marked No. 10 in the French plates contains an admirable specimen, the writing being almost perfect throughout the entire series, and forming, I should think, as complete and elaborate an historical record, as was ever executed upon stone. In some of these inscriptions the geographical detail is quite bewildering. In the series, indeed, which surrounds the Hall No. 2, there must be, at least, 1000 names of districts and cities, overrun or occupied by the Assyrian king¹.

The inscriptions of the Fourth class are those on the back of the slabs, which were never intended to be seen; they are strictly religious, containing no geographical notices whatever, but merely noticing the building of Khorsabad by the king, and invoking the gods to extend their protection to the city².

¹ In the second and third class of Inscriptions I should observe that the building of the city of Khorsabad is also commemorated at the conclusion of the historical and geographical detail.

² I observe that Dr. Hincks (p. 41 of his pamphlet on the Khorsabad Inscript.) infers, from the absence of the title "King of Babylon," and the omission of all notice of Nebo, the special divinity of Babylonia, on the Khorsabad reverses, that these Inscriptions were executed at an early period of the monarch's reign, before his conquest of Babylon, and were subsequently rejected: but I can hardly adopt this view of the matter. When the king styles himself  I understand him to include Babylonia. Immediately after proclaiming his titles, he further invokes the tutelary gods of Mesopotamia (or , the special name of the Euphrates in a later age) and of Babylonia. That Nebo is omitted in recapitulating the gods is true, but so also are omitted both Assurac and Sut, and the former was certainly the special divinity of Assyria. That, however, which to my mind seems to prove that the Inscriptions on the


I will now give a general sketch of the contents of the Historical series of Inscriptions. Arko-tsin, (the ordinary phonetic form of the Khorsabad king's name,) terms himself the king of Assyria and Babylonia, and of two provinces, of which the titles are usually given as Saberi and Hekti, and which may be understood to denote that portion of Upper Asia immediately to the eastward of the valley of the Tigris¹. His three special divinities, those whom he addresses in every inscription immediately after proclaiming his own titles, are Assarac, Nebu, and Sut².

A catalogue then follows of geographical names, which appear intended to mark the limits only of the Assyrian dominion, rather than to furnish a complete view of all the tributary provinces³.

It commences with the passage,—“From Yetnán⁴, a land sacred to the god Husi⁵, as far as Misr and Misek, (or Lower and Upper Egypt),







reverses and on the faces of the slabs at Khorsabad were executed at the same time, and that the only difference is of a religious character, is that they both equally refer to the building of Khorsabad, which indeed was the special object they were designed to commemorate, and which assuredly was a work undertaken at a late period of the monarch's reign. At the end of the Inscription on the Khorsabad reverses there is an invocation to “the great gods inhabiting heaven and earth, and the gods inhabiting this city,”—Khorsabad being then built.

¹ I conjecture that the name Hekti, or rather perhaps Haikdi, may be connected with the Armenian Haik; but the title would seem, from the geographical indications, to be applicable to Adiabene rather than to Armenia Proper.

² Sut was known to the Egyptians as a god of the Semite nations. Mr. Birch suggests an identity with Sadak (Σαδὰκ of Sanchoniathon), or even with Satan (see Trans. Royal Soc. of Lit., 2nd ser., Vol. II. p. 338); but I would prefer comparing the Babylonian Hercules, whom Berosus, quoted by Agathias, names Σάδης; for the initial character of the name  has the primary power, I think, of *Sar* or *San*, and is only used for *su* by a softening of the liquid. I have not been able to recognize the emblems of *Sut*, on the Cylinders, though the name is far from uncommon.

















³ It is of some interest to compare the geographical catalogues that occupy so conspicuous a place in the Standard Inscriptions of Nimrud and Khorsabad with certain passages of the Greek authors referring to the same subject. I allude to the list of the conquests of Ninus given by Diodorus Siculus, on the authority of Ctesias, and to the statement of the Assyrian boundaries which, according to Polyænus, was found on the famous monument of Semiramis, (see Diod. Sic. lib. ii. pp. 64, 65, and Polyæn. lib. vii. c. 25). It can hardly be doubted, I think, although the individual Greek names are not to be recognized in the Inscriptions, that both Ctesias and Polyænus must have had some knowledge of the geographical matter contained in the Assyrian tablets.

⁴ Compare the יְנָן of Joshua xv. 23.




⁵ The god whose name is written indifferently   and  , or simply  or , is, I feel pretty sure, “the sun;” for it is impos-

Maratha or Acarri¹, (which was the sea-coast of Phœnicia,) and the land of the Sheta."

The countries are afterwards mentioned in succession, of Media, Vakana, (perhaps Hyrcania,) Ellubi, Rasi, and Susiana; and the list closes with a multitude of names of tribes and cities which belong to Susiana, Elymais, and Lower Chaldæa, and the positions of which are illustrated by their contiguity to the great rivers Tigris, Eulæus, and Pasitigris².

ible otherwise to explain the phrase which occurs in almost every Inscription, to indicate the extension of the Assyrian sway, and which must needs be translated, I think, "from the land of the rising to the land of the setting sun," or "from east to west" (see British Museum series, Pl. 1, l. 14; Pl. 17, l. 2; Pl. 33, l. 5; Pl. 73, ll. 5—7, &c. &c.). Another name for the god Husi is   or  , which, as it may read Shemir or Semir, has some resemblance to Semiramis. The same orthography, however, would answer to *Shemes* on the one side (*r* and *s* interchanging), and to *Sur* on the other (the labial being softened to a vowel), and both of these are well-known names for the sun. Since writing the above, I have observed that Dr. Hincks (Khors. Ins., p. 24) considers the god  to be undoubtedly "the moon." I suspect, however, that the crescent figured on the Cylinders refers to the god   , who is joined with   or "the sun," as an object of worship. Compare the Cylinders numbered 23, 25, 30, 57, &c., with the passages on Bellino's large Cylinder, side 2, ll. 40 and 42, where   and   are associated. At Behistun, at any rate,  is never used for "a month;" the determinative monogram for that period of time is , as in British Museum series, Pl. 53, l. 32, and in all the contracts published by Grotefend.




¹ Maratha and Acarri are *Μαπαθος* and *Ἀκῆ*, or Acre, as already explained.

* * The names are given in greater or less detail in the different Inscriptions. The tribes which are usually mentioned, and which are particularly stated to be "Arabs" (  ), are, along the banks of the Tigris, the Yetah, the Rebiah (*ربيعه*), the Kheril, the Lemdod (compare *למודר*, and perhaps modern Lemlun), the Khamran (compare *Καμρίνη* applied by Eupolemus to Ur of the Chaldees), the Hubil (Heb. *עובל*), the Rahua, and the Luhti; and along the rivers of Susiana (which are identified quite positively by the ample geographical notices contained in Pl. 66 of the Khorsabad series), the Tebilu, the Akindara (or Akirdaru), the Bildu (?), and the Sati. Of the cities mentioned in this list, those of most consequence, as we learn from other notices, are Taha Dunis, Beth Takkara, and Beth Eden, upon the sea coast. On reading Dr. Hincks's paper on the Khorsabad Inscriptions, I find that he has transferred these


Then occur the annals, which are said to extend from the commencement of the king's reign to his fifteenth year¹.

The first campaign noticed is against Haluh-nerus, (?) king of Susiana; he was defeated, and 27,800 of his men, 900 of his captains, and 50 of his superior officers were carried into captivity.

The second campaign was against certain tributaries of the king of Egypt, and as in this passage, (which is repeated however in several of the halls,) occurs the only mention of the Egyptian monarch's name, I will give the sense as literally as I am able². "Khanan, king of the city of Khazita, and Shelki, of the tribe of Khalban, belonging to the country of Misr (or Egypt), prepared their forces for battle in the city of Rabek. They came against me, and I fought with them and defeated them³." The punishment to which the two chiefs were doomed is given, and the inscription then continues:—"I received the tribute of Biarku or Biarhu, king of Misr," certain unknown articles, coming from the countries of Harida and Arbaka, "gold, *Asbatera*, (perhaps tin,) horses, and camels." Now the name of Rabek, which is constantly made use of in connexion with the tributaries of Misr, is an almost exact translation of Heliopolis, the city of the sun. Biarku may be Pe-hur or Bocchoris, and Misr certainly, I think, represents

names from the Persian Gulf to the Mediterranean, applying titles which really belong to tribes and cities of Susiana and Lower Chaldea to the Syrian districts of Iturea, Galilee, Lebanon, and Hauran. He has been led into this error, I presume, from overlooking the names of Susiana,  or , (the latter being perhaps a plural form equivalent to the Heb. עֵילָם), and from his ignorance that the name  denoted the Tigris.

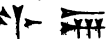
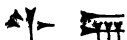


¹ In this sketch, I follow the order observed in the sculptures which surround Salle X., the events of the king's reign being there given in a sort of continuous narrative, without any reference to yearly dates. In Salles II. V. and XIV., the same events are chronicled, but they are given in greater detail, and strictly in the form of annals.

² The account of receiving tribute from Egypt is given in a somewhat fuller manner in Salle II. No. 11, Pl. 75; but the writing is too much mutilated to render the notice of any great value. The name of the Egyptian king, however, is written Biarka, rather than Biarku, the final  being dropped.

³ In the annals given in Salle II., the campaign here noticed is spoken of in the second year of the king's reign, while the Egyptian tribute was not received till the seventh year; yet in the passage, as it occurs in Salle X. (Pl. 145. 2, li. 1-3), the two events are most certainly connected.

Egypt¹; but is it not strange to find horses and camels among the tribute of Egypt, the former animal having been apparently unknown in that country until the eighteenth dynasty, and having been subsequently so rare an object as to be received in tribute from the nations of the east?



The next campaign is against Kehek, the king of Shenakti, a city which is usually mentioned in conjunction with Ashdod, and which must therefore have been situated on the sea-coast of Phœnicia, being perhaps the same place as Askelon; and here occurs a notice which I conceive to be of extreme interest. After the city of Shenakti was taken from Kehek, it was presented by the Assyrian king to Methati







¹ That the Ba-bek of the Inscriptions must represent On or Heliopolis is rendered almost certain by the name of the Syrian Heliopolis, which was vernacularly termed Baal-bek, the Phœnician Baal being exactly equivalent to the Egyptian Râ, or "the sun." Herodotus, in the same way, names the city of Venus Ἀράβησις; and Ptolemy, for the city of Ammon, has Παχναμονίς. BAKI indeed, is still retained in the Coptic to denote "a city," and the Coptic translator, therefore, of the Bible explains the Hebrew יָנָא or שֶׁנְאָא, which is the Greek Heliopolis, by ΒΑΚΙ πόλις. This determination of Heliopolis as the Egyptian capital, will agree sufficiently well with the synchronism which I have throughout sought to establish between the Khorsabad royal line and the twenty-first dynasty of Manetho; for that dynasty was the first that established its seat of government in Lower Egypt. I do not pretend, at the same time, to give the identification of Biarku with Pe-hur, the fifth king of the dynasty, as anything more than a conjecture. The name  or simply , will read Bianka as well as Biarka, for the  n and  r interchange perpetually; and Bianka resembles Pi-anch (as the name is read by Bunsen), the sixth king of the dynasty, rather than his immediate predecessor, Pe-hur; and, as far as the chronology is concerned, one king will suit as well as the other.

* The animals mentioned in this passage, which I have translated by camels, may possibly be elephants; for the epithet "with the double back," used in the epigraphs on the Obelisk, and applied especially to the camel depicted in the sculpture, is here omitted. It appears to me, indeed, extremely probable that as the elephant and the camel are denoted by nearly similar terms in the old Gothic and Slavonian tongues (the original signification perhaps being "the big animal"), so the Assyrian *Habba* (compare Sans. *ibha*; Egypt. *abu*; Heb. *habbim*, &c. &c.) may have been applied to the two animals indifferently. It is, at any rate, natural enough to find elephants included amongst the tribute of Egypt, whereas the export of camels from that country to Assyria can only be explained by their having been imported in the first instance from India. The attribution of the name of *Habba* to the elephant, as well as to the camel, will also render it probable that the same word applied to a natural object may signify "a forest" rather than "a desert." There are, however, some very obscure questions of etymology connected with this subject, which it would be inconvenient to discuss at present.

of Atheni¹, and to increase the probability of our having thus the earliest notice of Athens upon record, I must add, that in the general inscriptions which give a synopsis as it were of the historical data, the city of Shenakti is said to be held by the Yavana. That the latter name, moreover, really refers to the Ionians, there cannot be any doubt, for it occurs precisely with the same orthography at Behistun; and I confess, therefore, that I am half inclined to regard Methati of Atheni as Melanthus of Athens; the general views which I entertain of Assyrian chronology agreeing well enough with the date of Melanthus, who reigned, it may be remembered, very shortly after the first emigration of the Ionian families to Athens; at any rate we have here, I think, a notice of an Athenian chief presented with a Phœnician sea-port by the Assyrian king, for naval assistance probably rendered during the siege of the place.

The fourth campaign was against Amris, king of Tubal, who seems to have been supported by Arrah, king of Ararat, and by Meta, king of Misek, and also by the tribe of the Amorites, here called Amári. The conjunction of Tubal, Misek, and Ararat, certainly reminds one of Meshec and Tubal, who are always united in Ezekiel with Gog and Magog, and who are supposed to represent tribes in the northern part of Asia Minor. Meta, however, king of Misek, is often spoken of in connexion with Misr and the city of Rabek, where he seems to have generally resided; the two countries are always more or less associated, and if Misr therefore be Lower Egypt, Misek must of necessity be some country immediately contiguous; in all probability "the upper country" of the Hieroglyphs². If this identi-

¹ The name of this chief is usually written at Khorsabad as , but at Nimrud, in Inscriptions of the Khorsabad epoch, as  (See British Museum series, Pl. 67, l. 1, where, however, the initial character is mutilated). From a comparison of the two forms, the orthography of *Methati* of *Atheni* seems to me undoubted.

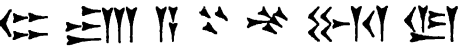



² I have long considered the identification of the country of which the name is represented by    or    (or any of the intermediate forms) to be one of the most difficult points connected with the Khorsabad Inscriptions. It did at one time appear to me highly probable that Misr was "Lower Egypt," and Misek "Upper Egypt," the similarity of the names causing them to be united in the Hebrew dual מִצְרַיִם; but I have since found it impossible to apply to a monarch who reigned in that remote country the many geographical notices which connect Meta of Misek with Syria and Armenia.

fication also be correct, the tribe of Tubal must be located in Northern Syria, between Palestine and the Upper Euphrates.

These campaigns, I should add, are almost all described in the same terms; the king of Assyria defeats the enemy in the field, subjugates the country, sacrifices to the gods, and then generally carries off the inhabitants, with their most valuable effects, into captivity in Assyria; repeopling the country with colonists drawn from the nations immediately subject to him, and appointing his own officers and prefects to the charge of the colonists, and the administration of the new territory.

It would be uninteresting to follow these campaigns in any detail. I will merely mention the countries which were successively overrun; firstly, we have Hamath and its dependencies; Atesh, however, which occupied so conspicuous a place in the wars of Temen-bar II. in connexion with Hamath, no longer appearing, and the inference therefore being that it must have been destroyed in the interval between the eras of Nimrud and Khorsabad. We have then a most elaborate account of a campaign against Ararat and Minni, the king of the former country, whose name was Arrah, reminding one of the Ara Keghetsig, or "Ara, the beautiful," of Armenian history. The con-

I now conjecture the people of Misek to be the Mes-segem of the Hieroglyphs, or the Semite inhabitants of Southern Syria, immediately bordering upon Egypt (see Birch's remarks on this nation—Trans. of Royal Soc. of Lit. 2nd series, Vol. II. p. 321), and it seems to me far from improbable that Adonibezek, whom the Israelites met on their first entrance into Palestine, and who was evidently very powerful (Judges i. 4—9), may have been king of the same people, Bezek and Misek being orthographically one and the same. There will still, however, be considerable difficulty in reconciling with a Syrian monarch the many Egyptian notices that refer to Meta; for he is described in some passages, according to the readings which seem to me most probable, as "residing in the city of Rábek, and administering the country of Misar."

I find from Dr. Hincks' paper on the Khorsabad Inscriptions, which has appeared since the above notes were written on Misar and Misek, that he reads the names  as "Gita of Kush," and actually makes use of this reading for chronological argument. That the letters  and its variant  represent *m*, rather than *gi*, is proved by many examples at Behistun, and might have been inferred from the powers of the corresponding characters in Median. There cannot, therefore, by any possibility be an allusion to the Zḥr of Africanus, and it appears to me equally impossible that  should be pronounced Kush, whether by that name we may understand the African Æthiopia, or, as Dr. Hincks subsequently suggests, the Asiatic Susiana.

tiguous countries of Taibasta and Hustisa are next subjugated. Yanaluh, king of Nahiri or Northern Mesopotamia, dwelling in the capital city of Hublska, sent in his tribute. Assarelak of Taha-ela and Itti of Elabri are subsequently attacked and reduced, the king founding cities in these provinces for the Assyrian colonists whom he settled there to replace the population carried into captivity¹.





The next campaign was against Kharkhar or Persarmenia, and against Media, and in the latter country the various great cities that were taken, were dedicated to the Assyrian gods, and named after the principal members of the Pantheon, Taha-Nebu, Taha-Bel, Taha-Hem, and Taha-Ashtera.

Detailed accounts follow of wars against Rita of Ellubi, which appears to have been Southern Media, against Arazen of Mekhatseri, which was a city and dependency of Ararat², against Tarkhanzi of Mesda, Kanzinan of Khamána, and Tarkheler of Togoma.

The king afterwards marches into Syria and besieges Ashdod, ruled over by a king named Haleri, who after conducting the defence for some time, flies to Misr or Egypt, and the city falls. After this the war is resumed against Ararat and Ellubi, and Rita, the king of the latter country, is driven out and compelled to take refuge in Susiana.

The closing campaigns, which seem to have exceeded all others in importance, were against Susiana and Elymais, and against Babylonia

¹ To illustrate, or even to give an outline of the geography of the Khorsabad Inscriptions, would require more care and space than I can here bestow upon the subject. The names, indeed, of the cities, tribes, rivers, and towns belonging to each province are so numerous, and appear under such a variety of forms in the different Inscriptions of the period (the sculptured slabs of the centre and south-west Palace at Nimrud being referable to the same historical epoch as those of Khorsabad and Koyunjik), that their dissection and identification may be said to constitute a distinct study of itself. I shall reserve, therefore, the geographical detail of these Inscriptions for a future occasion.












² The name of Mekhatseri or Mezatseri, (for the name is written either with the guttural or sibilant,) might be conjectured to apply to Van itself; inasmuch as the god    , who was the special divinity of that place, and whom I am inclined to identify with the Armenian Anaitis, is mentioned in this passage at Khorsabad, and in this passage only, among the trophies brought away to Assyria after the conquest of Ararat. It is, I think, a remarkable circumstance, that so very few of the geographical names referring to Armenia and its dependencies in the Inscriptions of Nimrud and Khorsabad, should be found on the tablets of Van. I can only account, indeed, for the great discrepancy of nomenclature by supposing many centuries to have intervened between the two periods of history.*

and Chaldæa, the whole of which countries were evidently very closely indeed connected. A multitude of tribes, cities, and chiefs are mentioned in describing these wars, which it would be wearisome to enumerate, though undoubtedly the information thus supplied will prove of the greatest value in illustrating the early geography of the provinces on the Persian Gulf.

There is still another expedition noticed against the seven kings of the Yakanatsi, who dwelt in the land of Yetnan, on account apparently of their refusing to pay the same tribute which had formerly been paid, the king says, "to the kings, my ancestors, who ruled over Assyria and Taha-Dunis." The rebellious tribes having been subdued were placed in bondage, some amongst the Khetta or Hittites, others amongst the Chaldees. Their gold, silver, and valuable property were carried off to Babylon, and they were themselves dispersed through the country as far as Beth Eden, and the Arab tribes who inhabited the district of Yetmira, dependent on Susiana.












After a further brief notice of Meta, king of Misk, the annals finish, and are followed by an account of the building of the city. "At that time," the king says, "among the people of the countries who were obedient to me, and who worshipped the gods Assarac, Nebu, and Sut, after the fashion of Egypt, and near to Nineveh, I built a city and named it Beth Arko-tsina¹ (or, to use the popular synonym, Beth Sargon), and I dedicated it to the gods, Bel, Shemir, Nebo, Hem, Seb," &c., &c. The remaining portion of the inscription is entirely religious and descriptive, relating to the embellishment of the city, and the institution of periodical festivals in honour of its tutelary deities.

I have thus given a brief sketch of the general purport of the

¹ In the few notes which I have been alone able to add to the present sheets in their passage through the press, since the publication of Dr. Hincks's Paper on the Khorsabad Inscriptions, I have purposely avoided all discussion upon points of etymology and grammar; for I could hardly hope in so hurried a manner to make myself at all intelligible. I cannot avoid however mentioning that the phrases  I  and  I  which Dr. Hincks (p. 43) reads, "out of it I brought," and "out of them I brought," signify really, "I gave it the name," and "I named them," the forms of    or   being often substituted, which have the same sense, as derivatives from a root corresponding to  in Hebrew, and  in Arabic.

inscriptions surrounding one of the halls at Khorsabad, and as all the other legends throughout the palace are, with little variation, either repetitions or amplifications of the several religious, historical, and geographical notices contained in this summary, I need not further discuss them.

One other subject only connected with the Inscriptions of Khorsabad requires a few remarks. These inscriptions furnish ample evidence of the introduction of a strong Scythic element into the population of Western Asia, during the period which elapsed between the eras of Khorsabad and Nimrud; but in what sense we are to understand Scythic, or rather to which family of nations the early Scyths are to be referred, is by no means clear. At Behistun there are repeated notices of the *Sacæ*, a name which it may be remembered, Herodotus says was applied by the Persians indiscriminately to all the Scythians. These *Sacæ*, indeed, are represented among the captives at Behistun, the last figure with the high cap, which Herodotus also remarks was peculiar to the nation, being *Sakuka*, the *Sacan*. Now in the Babylonian translation at Behistun, the term employed for *Sacan* is *Tsimri*, and this same term, unknown under *Sardanapalus* and his immediate line, runs as a general title through all the Assyrian inscriptions, from the age of Khorsabad downward¹. There are thus the *Tsimri* of *Khamána*, the *Tsimri* of *Beth Hebra*, (which was a district I think of *Syria*,) the *Tsimri* of *Tubal*, the *Tsimri* of *Babylonia*, the *Tsimri* of *Assyria*. In fact, these *Tsimri*, I think, or nomade Scyths, are spoken of as the militia of the different provinces in contradistinction to the fixed agricultural peasantry. The question then arises, if the *Tsimri* can be the same as the *Cymri* or *Celts* of

¹ The name is found in two passages at Behistun, and is repeated three times at *Nakhsh-i-Rustam* with the same orthography of   . In Assyrian, the last letter is dropped as superfluous, the character  representing the complete syllable *mer*, and the name, thus reduced to  , may be observed in almost every Inscription of Khorsabad and Koyunjik and succeeding periods. I cannot be sure, as I have before remarked, that the character  represents *tsi* or *dsi*. This determination, indeed, depend on its resemblance to  or , and although the forms are often confounded, I see strong reason to doubt their phonetic identity. Very possibly   should be pronounced *Kimer* or *Cymr*, rather than *Tsimri*.

Europe. The Nakhsh-i-Rustam inscription divides the Sacæ into two great tribes, the Humarga, who are of course the Ἀμύργιοι of Herodotus¹, and the Tigrakhuda, or "bowmen," (as I now translate the title, rather than "dwellers on the Tigris"); but we gather nothing from these Persian names as to the great family of nations to which the Sacæ belonged. My own opinion is, that the terms Sacæ and Tsimri, which are perhaps synonyms, were applied to all the early warlike nomade nations, without any distinction whatever as to family. That there must have been a large Tartar population of Persia before the time of Cyrus, is proved by the so-called Median translations in the tri-lingual tablets, which are unquestionably written in a Tartar dialect; but I am by no means inclined to identify this population especially with the Sacæ. The Sacæ or Tsimri were, I think, the Elyaut or nomades, as opposed to the fixed peasantry and they numbered probably in their ranks, Celts, Slavonians, and Teutons, as well as Tartars of all grades, from the primitive type of the Fin and Magyar to the later developed Turk and Mongolian. I may add, that these Tsimri are also mentioned by Jeremiah among the nations of Western Asia, in allusion apparently to the Sacæ who at that period held Northern Media and Assyria, and had even penetrated to Palestine and Egypt. The passage to which I allude is in the 25th verse of the 25th chapter, where the kings of Zimri are classed with the kings of Elam and the kings of the Medes.

I now pass on to Bel-Adonim-sha, son of the builder of Khorsabad. Of this king, unfortunately, very few historical inscriptions have been yet discovered; the only two, indeed, with which I am acquainted and which are at all legible, are, firstly, an Inscription engraved on the rock at Bavian², adjoining to the sculptures described by Mr. Layard on Mr. Ross's authority; and secondly, a legend on one of the votive bulls found at Koyunjik. The former contains a very detailed account of Babylonia and Susiana; and in the latter, I find recorded the same conquest of Susiana or Elymais, together with the capture of

¹ This name, which is imperfect in the Persian copy, reads distinctly both in Median and Babylonian, as *Humawarga* or *Humurga*. I failed to recognize the name until I obtained Tasker's copy of the Nakhsh-i-Rustam Inscription, owing to the faulty representation of the final letter in the published Median text of Westergaard, and the Manuscript of Dittel.

² This Inscription, of which I saw an imperfect copy at Mosul, is repeated four times upon the rock at Bavian; and Mr. Layard having lately succeeded in taking copies of all the four legends, hopes, notwithstanding the mutilated condition of the writing, to be able, by comparing them together, to form one perfect and continuous text.





Sidon¹. The inscription at the Nahr el Kelb also belongs to this king, and may be supposed therefore, with great probability, to commemorate the latter achievement, but unfortunately the cast of the inscription in the British Museum, for which we are indebted to Mr. Bonomi, is, beyond a few isolated words, altogether illegible. The ordinary Koyunjik Inscriptions are for the most part religious, and exceedingly difficult to make out; they are in fact, by far the most difficult inscriptions that have been yet met with in the Assyrian character².

I have already alluded to the opinion entertained by some people, that this king is Sennacherib, and have declared my own views to be against that identification. I will merely therefore here observe, that the notice of Sidon, instead of corroborating the Koyunjik king's claim to be regarded as Sennacherib, rather makes against it; for in the history of Sennacherib, as given by Josephus, the campaigns in Phœnicia, Egypt, and Judea are classed together, and Sidon therefore would hardly have been mentioned without some allusion being at the same time made to Egypt. According also to Scripture account, it is hardly credible that Sennacherib, after his disastrous retreat from Judea, should have had leisure to execute any tablet recording the conquest of Phœnicia, in the brief period which alone intervened between his return to Nineveh and his assassination in the temple of Nisroch.

Of the third king of this line we know positively nothing but the name; that name has been supposed by Mr. Layard to be identical with the name of the builder of the north-west Palace at Nimrud, but the identification seems to me to have been assumed on insufficient grounds. I read the one name as Assar-adon-pal or Sardanapalus, and the other as Assar-adon-assar³.

¹ See Plate 61, of the British Museum series.

² Since the above was written, I have learnt from Mr. Layard that he has discovered a perfect, and apparently a very full historical Inscription of the Koyunjik king among the ruins of the palace which he has been excavating at that place. Such a discovery, which must almost certainly decide the question of this king's identity with Sennacherib, and which must further afford a most valuable addition to our general knowledge of Assyria, appears to me to be of far more importance than the mere laying bare of sculptured slabs, which, however interesting the design, neither furnish us with new ideas, nor convey any great historical truth.

³ The third element of the one name is, I think, uniformly  or , and of the other , which I consider to be a contraction of . At the same time, I must repeat that very little confidence can be placed on the phonetic rendering of these names.

Before quitting the subject of the Khorsabad line of kings I must recur to Mr. Layard's late announcement, that in a perfect copy of the inscription, in the tunnel on the Zab river, he has found a notice of the royal ancestors of the Khorsabad king, ancestors who, singularly enough, are not even named in any other inscription of this monarch. Admitting the certainty of this discovery,—and the fragments of the tunnel Inscription already published are greatly in its favour',—I must of course modify the opinion I have advanced of the Khorsabad line having followed almost immediately on the royal line recorded at Nimrud; but I should still be inclined to attach a very moderate limit to the interval. If the Nimrud kings, indeed, should be assigned to the thirteenth or twelfth century before the Christian era, I would suppose the Khorsabad line to have flourished in the eleventh or tenth century.

I have already stated, that we know of many kings of Assyria posterior to the builders of Khorsabad and Koyunjik. The king whose actions are recorded on the cylinder in the British Museum seems to have been a not less celebrated warrior than Temen-bar himself; his expeditions are described against Sidon and Phœnicia, against Damascus and Tubal, against Ararat, Minni, and its dependencies, against Susiana or Elam, against Shinar and Chaldæa, with the famous cities of Beth Takkara and Borsippa, against the Arab city of Haduma, which, it is observed, Bel-Adonim-sha, the Koyunjik king,¹ had subjugated in former times. It is further stated, how all the tribes were reduced who lined the Lower Tigris, and how the king afterwards pushed his arms into Media, and Central or perhaps Eastern Persia. Unfortunately this king is nameless; that is, the particular portion of the inscription which contains the name is destroyed; but he was certainly as celebrated a warrior as any of the monarchs who preceded him².


¹ The name of the father of the Khorsabad king is probably found at the commencement of the 5th line of Pl. 35 of the British Museum series. The initial letter or letters being lost, and some of the others being uncertain, I will not hazard a reading of the name; but I may observe that the fragments which remain are sufficient to show that the term appended to the royal title in the Khorsabad reverses is not a patronymic, as has been sometimes supposed. That term being compounded of the names of the gods, is probably an honorary epithet, but I know nothing certain regarding it.


² See British Museum series from 20 to 29. As the date of this Inscription is of great consequence to the argument about the identification of Sennacherib and as the passage in Pl. 22, l. 53, imperfect as it is, may be considered inconclusive, or may even be supposed to refer the cylinder itself to the Koyunjik king, I think it as well to notice that the fragments which remain of the king's name in l. 1, Pl. 20,

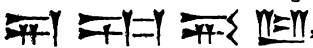
Another cylinder of this class is in the possession of Col. Taylor, and, as far as I can ascertain from an impression of the writing, which I took many years ago, it contains the annals of a distinct king, not less elaborately described than those upon the Obelisk.

The black stone upon the table, belonging to the Earl of Aberdeen, names Akadunna,⁽¹⁾ who was king of Assyria and Babylonia, and who lived probably not long before the time of Nebuchadnezzar, as a Babylonian city is noticed which is of that epoch, and which is never mentioned in the earlier inscriptions¹.

One of the most powerful of all the kings, too, must have been a certain Akpalutakra,⁽²⁾ of whom we have only one inscription, which however abounds in geographical detail. I place this king towards the close of the dynasty, as the names are found to be gradually approaching their Babylonian forms².

cannot possibly be brought to assimilate with , and that there is the same disagreement between the name of the king of Sidon on the Cylinder, which is given in Pl. 20, l. 14, and again Pl. 21, ll. 40 and 50, and the king of Sidon, contemporary with the builder of Koyunjik, the fragments of whose name are found in l. 7 of Pl. 59. These points of evidence are of themselves sufficient to convince me that the Cylinder king must be posterior to the builder of Koyunjik; but the question can hardly be considered to be decided until the Cylinder annals have been compared with Mr. Layard's new historical Inscription from Koyunjik.

I now find that Dr. Hincks derives from this name of the king of Sidon an additional argument in favour of the identity of the Koyunjik king with Sennacherib; for he reads the name Abdistarti, and compares it with Ἀβδᾶρταρος or עברת עשתרת, the name of a king stated by Menander to have ascended the throne of Phœnicia seven years after the death of Hiram, Solomon's contemporary, (see Khorsabad Inscriptions by Dr. Hincks, p. 69). I can hardly believe, however, that the Cuneiform name was read as Dr. Hincks supposes; for Ashtera, or Astarte, is always written in Assyrian as ; and I find an equal difficulty in reconciling Menander's Abdastartus, who must have lived in the beginning of the tenth century B.C., with the usually received era of Sennacherib, which was at least 250 years later.

¹ I refer to the famous city inscribed on the Babylonian bricks, and on all the monuments of the age of Nebuchadnezzar, the name of which, , I read doubtfully as Beth Digla, comparing the بَدِغْلَا of the Arabs (see line 16 of the last column of Lord Aberdeen's stone).

² See Plates 17 and 18 of the British Museum series, and compare l. 32 of Pl. 18, where the name  is applied to the Euphrates, as at Behistun, instead of the old title of  or .

There is still another king, named Akiba, of whom I saw an inscription at Koyunjik, found in the debris above the palace of Bel-adonim-sha; his wars were described in some detail with Ter-aman, king of Susiana, but there was nothing in the record to afford any clue to his historical identity¹.

Some of the monarchs whom I have thus mentioned, belong, I think, in all probability to the Lower Assyrian dynasty, or to that particular line mentioned in Scripture, but we must wait for fresh materials before coming to any definite conclusion even on this point.

The only approximate chronology that it is at all safe to assume at present is as follows. Herodotus gives for the duration of the Assyrian dominion in Upper Asia, 520 years, reckoning, as it would seem, from the defection of the Medes². This defection of the Medes is, at the same time, a disputed point in chronology, and some even of the best chronologists maintain that the numbers of Herodotus, indicating a fixed epochal date, should be calculated from the Chaldæan era of Nabonassar³; but, whichever may be the correct explanation, the point of departure will, at any rate, almost certainly fall in the eighth century before Christ, and the Assyrian empire, therefore, may be considered, on the authority of Herodotus, to date from the commencement of the thirteenth century, B. C.⁴

¹ I must again notice the son and grandson of Assar-adon-assar, whose titles have been recently discovered by Mr. Layard, and also the two new monarchs, whose names he has found in excavating a mound to the north-west of Khorsabad. As I have not yet seen transcripts of these names, I can say nothing as to their possible phonetic reading.

² Lib. I. c. 95.

³ With Niebuhr, I believe, originated this explanation of the numbers of Herodotus. The reasoning by which it is supported is considered by the German scholars to be conclusive, and Bunsen thus adopts throughout his work upon Egypt the dates which depend upon it (era of Nabonassar B.C. 747; commencement of Assyrian empire B.C. 1267) as established points in chronology.

⁴ Since ancient history first occupied the attention of the learned of Europe, the chronology of the Assyrian empire has been one of the "questiones vexatæ" of classical literature. The long period and the short period, or the chronology of Ctesias and the chronology of Herodotus, have had their respective advocates, and authorities of almost equal weight have been marshalled upon either side. In confirmation of the dates of Herodotus, the Abbé Sevin has quoted Thallus, Appian, Dionysius of Halicarnassus, Porphyry, Macrobius, Africanus, and perhaps even Alexander Polyhistor; while Freret has brought to the support of Ctesias the evidence of Manetho, Plato, Aristotle, Pausanias, Cephalion, Castor, Æmilius Sura, Josephus, Ælian, Diodorus Siculus, Eusebius, Sulpicius Severus, Philo of Byblos, Eustathius, and Syncellus (compare the two articles in the fourth and seventh volumes of the *Mémoires de l'Acad.*, XII^{me} edit.). The school of Niebuhr implicitly follows Herodotus, regarding Alexander Polyhistor's sixth

Now, supposing that the records of Nimrud refer to an early period of the first, if not only, *imperial* dynasty, (and a fair examination of all the evidence doubtless leads to that conclusion,) the building of the north-west palace may be assigned to the end of the thirteenth or beginning of the twelfth century before the Christian era; and, as such a date would coincide with the twentieth dynasty of Egypt, the wars recorded on the Obelisk, in which the Assyrian arms were certainly pushed as far as Tyre, Sidon, and Byblus, would be explained by the depression under which Egypt suffered after the reign of Rameses III., the first king of the twentieth dynasty, and for the three following centuries. It is further to be observed, that the geographical indications are all in favour of this approximate chronology. The importance of the city of Atesh, the establishment of the Khetta in Southern Syria, the very nomenclature of the Phœnician ports,—Tyre, Sidon, Gubal or Byblos, Acarri or Acre, Beluta or Berytus, Arvad or Aradus,—constitute points of evidence which suit this period and no other¹. I think, indeed, that almost all the Asiatic names which occur in the Egyptian records of the eighteenth and nineteenth dynasties, and in the wars of Rameses III., are to be found more or less modified in the Assyrian annals, and that the indications, therefore, of political geography may be held to restrict almost the age of the Nimrud obelisk to the twelfth century, B. C.

It must be quite unsafe to speculate on the causes and the duration of the interregnum, or at any rate of the unrecorded interval, which occurs between the Assyrian periods of Nimrud and Khorsabad. Possibly this period may be represented by the internal revolution which was described by Bion and Alexander Polyhistor, and which, according to their statement, changed the succession from the line of the Dercetades to the line of Beletaras, the officer who headed the revolt². I cannot myself believe that there was any violent disruption of the line of Assyrian royalty, still less that the break in the annals was caused by foreign conquest. There may have been intestine troubles, which for a time prevented the extension of the Assyrian

dynasty of forty-five kings, as the only point of collateral evidence which is at all deserving of consideration, or which it may be worth while to compare even with the 520 years fixed by the Father of history; and, as far as Cuneiform research has hitherto extended, everything I think tends to confirm the German critique.

¹ Mr. Birch observes in his paper "On the Statistical Tablet of Karnak" (Trans. of Royal Soc. of Lit., 2nd series, Vol. II. p. 347), "During the nineteenth dynasty, Tyre and Sidon, Berytus, Aradus, Sarepta, and the Jordan, are mentioned; and under Rameses II. the empire had probably stretched as far as Beyrout, where it was met by the Assyrian boundary."

² See Agathias, Lib. II. p. 63.

arms to the westward, and put a stop to the erection of palaces and the engraving of inscriptions; but the Khorsabad king was certainly of the same race, probably of the same family, as the earlier monarchs of the Nimrud line; and I should not suppose that more than sixty or seventy years intervened between the two periods. If, then, the six continuous kings of the Nimrud line reigned, as I think, from about B. C. 1250 to B. C. 1100, and an interval were further allowed of seventy years after the suspension of the line, the era of the Khorsabad king would fall in about B. C. 1030, before the age of Solomon, and contemporary with a certain Pe-hor, of Egypt, who was the fifth king of the twenty-first dynasty, and who would thus represent the Biarku of the inscriptions, residing in the city of Rábek.

Before closing, I will rapidly run over the remaining subjects of interest connected with the Cuneiform Inscriptions. There are, it is well known, a series of inscriptions found at Van, and in the vicinity. These inscriptions I name Armenian. They are written in the same alphabet that was used in Assyria, but are composed in a different language,—a language, indeed, which, although it has adopted numerous words from the Assyrian, I believe to belong radically to another family, the Scythic¹. There are six kings of the Armenian line following in a line of direct descent. I read their names as—1, Alti-bari; 2, Ari-mena; 3, Isbui; 4, Manua; 5, Artsen; and 6, Ariduri(?) This family, which seems to have held extensive sway in Armenia, Asia Minor, and Northern Media, could have only, I think, risen into power on the decline of the Assyrian monarchy. On these grounds, then, which are further supported by certain points of intrinsic evidence contained in the inscriptions, I propose to assign the monuments of Van to the seventh and eighth centuries before Christ, supposing the kings who executed them to have been contemporaneous with those Medes who first threw off the Assyrian yoke.

I am not able, at present, to attempt a classification of the kings of Babylon, such as they are known from the various relics that we possess of them; nor, indeed, can I say, with any certainty, whether the kings recorded, with the exception of Nebuchadnezzar and his

¹ Dr. Hincks, it is well known, has published an elaborate paper on these Inscriptions in the ninth volume of the Society's Journal, and has endeavoured to prove that the language is Indo-Germanic. Admitting, however, the extreme value of the dissections contained in that paper, and greatly admiring, as I do, the sagacity that has determined the signification of so many words of which the phonetic rendering is quite erroneous, I cannot attach much weight to presumed grammatical affinities, when I know that the forms on which these affinities depend are in reality quite different from Dr. Hincks's readings.

father, may be anterior or posterior to the era of Nabonassar. The Babylonians certainly borrowed their alphabet from the Assyrians, and it requires no great trouble or ingenuity, at the present day, to form a comparative table of the characters; the hieratic signs, indeed, of the Assyrians and Babylonians differ more from the ordinary letters employed by them, than the alphabets of the two nations differ from each other.

The earliest Babylonian record that we have, is, I think, the inscription engraved on a triumphal tablet at Holwan, near the foot of Mount Zagros; it is chiefly religious, but it seems also to record the victories of a certain king, named Temnin, against the mountaineers. Unfortunately it is in a very mutilated state, and parts of it alone are legible¹.

On the relic called Michaux's stone, the purport of which is entirely religious, the name is Seb-pal-utakra, son of Beletsira, but I doubt the record being of royal origin. Upon a black stone in my own Cabinet, which appears to refer to the sale of certain lands upon the canal of Nimani, near Babylon, the king in whose reign the contract took place, is named Sut-athra-saram. The contracts upon the ordinary clay barrels, of which there are numbers in the museums of Europe, are usually of the Persian period, the documents dating from a certain year of the reign of Darius or Artaxerxes.

Perhaps the most interesting, however, of all the Babylonian monuments are the bricks. It was a custom, borrowed from Assyria, that the bricks used in building the ancient cities on the Lower Tigris and Euphrates should be stamped with the name and titles of the royal founder; and I should hope that ultimately specimens of these bricks, collected from every ancient site throughout Babylonia and Chaldæa (even if no other monuments should be found) would enable us to reconstruct the chronology of the country.

With regard to Babylonia proper, it is a remarkable fact, that every ruin from some distance north of Baghdad, as far south as the Birs Nimrud, is of the age of Nebuchadnezzar. I have examined the bricks *in situ*, belonging perhaps to one hundred different towns and cities within this area of about one hundred miles in length, and







¹ I discovered this tablet on the occasion of my last visit to Behistun, and with the help of a telescope, for there are no possible means of ascending the rock, succeeded in taking a copy of such portions of the writing as are legible. On the tablet itself, a figure, clad in sacerdotal costume and apparently a eunuch, is presenting to the monarch a throng of captives, who are chained together, their arms being bound behind them, and rings being fastened in their nostrils, to which the leading string is attached.



thirty or forty in breadth, and I never found any other legend than that of Nebuchadnezzar, son of Nabopalassar, king of Babylon¹. Porter gives one legend of a king, Hem-ra-imris, upon a brick which was said to have been found at Hymar, near Babylon, but I should doubt its belonging to that site, as I have examined hundreds of the Hymar bricks, and have found them always to bear the name of Nebuchadnezzar. At the same time, it is impossible to believe that Nebuchadnezzar was really the first builder in Babylonia. As far as the town of Babylon is concerned, I admit without hesitation, that it owed its origin to that king, for the name is never once mentioned in the inscriptions anterior to the time of Nebuchadnezzar, and the monarch moreover says in Scripture,—“Is not this the great Babylon that I have built?” but with regard to the neighbouring city of Borsippa, which is certainly, I think, represented by the Birs Nimrud, there is evidence of its being the capital of Shinar, as early almost as the earliest Assyrian epoch. At any rate, Temen-bar, the Obelisk king, records his conquest of Borsippa in the ninth year of his reign, and the city is mentioned in every subsequent record. It would appear then, as the Birs Nimrud and the surrounding ruins are exclusively formed of bricks stamped with the name of Nebuchadnezzar, that in the earlier period, the people of Shinar could not yet have





¹ The principal ruins to which I refer in this part of Babylonia are, 1stly, At a spot on the Isháki canal, about fifteen miles north-east of Baghdad, where excavations are often made for the sake of obtaining bricks. 2ndly, At Baghdad itself, the right bank of the river within the town being formed for the space of nearly one hundred yards of an enormous mass of brickwork, which until lately was supposed to be of the time of the Caliphs, but which I found on examining the bricks to date from the age of Nebuchadnezzar. 3rdly, A large mass of mounds near the Khan Kahya on the road to Hillah. 4thly, Akkerkuf, called in the old Arabic works, “the Palace of Nimrud,” and perhaps the Accad or Accar of Genesis. 5thly, Extensive ruins near Khan-i-Sa’ad, which formed the after site of Maiozamalca. 6thly, At Za’aleh near Musáib on the Euphrates. From this spot I obtained the black stone of Sut-athra-saram, and I have been assured that another inscribed tablet is to be found in the ruins, though as I once spent an entire day in vainly searching for the relic, I almost doubt its existence. 7thly, The famous city of Cutha, which I had the good fortune to discover in 1845, and which I have since repeatedly visited. The ruins are situated in Lat. 32° 41’ 36”, and Long. 44° 42’ 46”, and are almost equal to those of Babylon. From this city came the Cuthæans who colonized Samaria, and it was traditionally the scene of the early miracles of Abraham. The other cities of Nebuchadnezzar are at, Kalwádhá, Hymar, Babylon, and Birs-i-Nimrud. I have no means at present of identifying with these sites the numerous cities named in the India-House Inscription, and on Bellino’s Cylinder; nor indeed, can I venture to point out the emplacement of the two cities mentioned on the bricks, Beth Digla and Beth Dsida, (or Beth Jida), which seem to have been accounted the *chef-d’œuvre* of Nebuchadnezzar.

adopted the Assyrian alphabet; and that Nebuchadnezzar, moreover, must have almost entirely rebuilt the city. This rebuilding, indeed, and especially the construction and dedication of the great temple, now represented by the Birs, is certainly noticed in the Standard Inscription of Nebuchadnezzar, of which the India-House slab furnishes us with the best and most perfect copy, and which is in fact a sort of Hieratic statistical charter, giving a detail of all the temples built by the king in the different towns and cities of Babylonia, naming the particular gods and goddesses to whom the shrines were dedicated¹; and stating moreover a variety of matters connected with the support of the temples, and with the sacrificial and ceremonial worship of the kingdom, which I really cannot pretend at present to interpret with even approximate accuracy.






I may add, that in the old inscriptions, Babylonia is known by no other name than that of Shinar, a name which is not only familiar to us from Scriptural notices, but which has also been preserved in a fragment of the Greek historian Histæus. I do not think that this name has any connexion whatever with the Singara of the lower Empire and modern Sinjar, and I should almost doubt even its identity with the Egyptian Saenkara, for I cannot believe that the Egyptian arms ever really penetrated to Babylonia. It is at any rate, I think, impossible, that the name of Babel should occur in an inscription of Thothmes III., for, as I have observed before, the title was locally unknown before the age of Nebuchadnezzar².

¹ In addition to those deities whom I have already had occasion to mention in speaking of the Assyrian Pantheon, I may notice the following gods named in Scripture, whom I have, I think, identified in the Inscriptions at Babylon. *Sheshach* and *Merodach*,  and ;  and ;  and .

Gad and *Minni*,  and , (see East India House Inscription, col. 4.

ls. 38 and 52,) and  and , (ditto, col. 1, l. 30). I suspect that the Succoth Benoth of Scripture, is the god (or goddess) whose name is ordinarily written  and , (see Bellino's Cylinder, side 1, l. 27, &c.,
































and compare East India House Inscription, col. 4, l. 16, and Khorsabad Inscriptions, Pl. 87, l. 8; Pl. 152, l. 11, &c.), and it seems also far from improbable that



    , (East India House Inscription, col. 4,

l. 44,) may be the Biblical Leviathan, for on the cylinder numbered 76, in Cullimore's collection, this god is symbolized by a sort of marine monster.

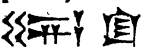









² Since I penned note 3 to page 436, I have again carefully considered the











In the later Cuneiform Inscriptions, the ordinary name of Babylon seems to be *Athra*, which I conceive to be the name mentioned by Pliny, in his description of the Euphrates, when he says,—“The right branch of the river runs towards Babylon, formerly the capital of the Chaldees, and after traversing that city and also another which is called Otris, is lost in the marshes¹.”

whole question of the nomenclature of Babylon, and although in working out the argument I have followed a somewhat different course of induction from that pursued by Dr. Hincks, I have arrived at the same result. I have observed in the first place, from comparing the form    with the form     (see among other examples, East India House Insc., col. 4, l. 47, and col. 4, l. 28), that although in the former word an *r* () is usually introduced, while in the latter, the *n* () in every other example is replaced by *l* ( or ) , still the resemblance of the two orthographies is sufficient to warrant the presumption of phonetic identity; and I have remarked in the second place, that the monogram  does actually represent the same phonetic power as   , for not only is the plural form    at Khorsabad constantly replaced by   , but at Persepolis this same character  (imperfectly given by Westergaard, as  or , Plate xiv, a, line 10,) is used in the Babylonian translation of the Persian word *Duvarsham*, the term which it is intended to express being most assuredly *Báb*, “a gate,” answering to  in Chaldee, and باب in Arabic. I now therefore regard it as almost certain that the two forms of     and     were used indifferently to express phonetically the name of Bábileh, the remarkable and almost constant disagreement between them being the effect of a mere calligraphic fashion, rather than of any fixed alphabetic law; and I further conjecture, that the name originated in the holy character of the city, the signification of it being “the Gate of God,” or if we follow the mythology of Sanchoniathon, “the Gate of Ilus or Chronus.” The objection, of course, which I have offered in the text to the possible occurrence of the name of Babel in the Hieroglyphic records must be now withdrawn, but I remain as incredulous as ever that the Egyptian arms could have really reached to the Lower Euphrates.







¹ See Pliny, lib. v. c. 21. Some of the manuscripts have *Mothi* instead of *Otris*. The form of   , which at Behistun is exclusively used for





Lower Babylonia or Chaldæa will probably furnish far more important materials for illustrating the ancient history of the country

Babylon, is first found, I think, in the East India House Inscription, where Nabopalassar, the father of Nebuchadnezzar, is in two passages distinguished as king of , (see col. 7, ls. 11 and 48). Now that the sign of  has the phonetic power of *tr* or *thr*, is proved by its interchanging at Behistun with the letters   in the variant Babylonian orthographies of the Persian name Chitratakhma, as well as by its being often replaced in Assyrian by [the characters  , (see amongst other passages, British Museum series, Pl. 7, l. 29); but I do not feel at all sure that as an ideographic monogram, it may not also have been pronounced Babel; just as the Assyrian monogram , representing ideographically the phonetic powers of   , was, I think, pronounced Nineveh. At any rate, it is in this manner alone, that I can account for the uniform employment of the orthography in question at Behistun and Persepolis, in an age when the name of Babylon was universally, if not exclusively used upon monuments, and where the Persian and Median texts do actually give the true vernacular title.

Before I quit the subject of Babylon, I cannot avoid adding a few remarks on the orthography of the name of Nebuchadnezzar, which Dr. Hincks, in p. 33 of his paper on the Khorsabad Inscriptions, seems to have involved in unnecessary obscurity. The only ideograph ever employed in writing this name is the monogram  or  for the name of the god Nebu. The remainder of the name in all its forms is phonetic; the third character, which has the form of  both on the bricks and on the East India House Inscription, but which is replaced by  at Behistun and on some other monuments, is the guttural *k* () optionally interchanging with a sibilant according to a law of Babylonian orthography; while the fourth character, which has also the form of  on the bricks, but which is more clearly represented as  in the E. I. H. Inscription, col. 1, l. 1, is used at Behistun in other names for *d*, and is, I believe, a mere variant of  or . The only other difficulty is in regard to the character , which has sometimes the power of *du*, sometimes of *dar*, and sometimes possibly of *dan*, for the final liquid in all characters of this class may be optionally softened to *u*. Whether the name therefore be read Nebu-kudar-russor or Nebu-sadussar, or be given any intermediate form, I consider immaterial, the Babylonians having been evidently unable to appreciate nice distinctions of articulation. I further remark on the subject of Babylon, in Dr. Hincks's paper

than are to be found about Hillah and Baghdad. The ruins of Niffer are more extensive than those of Babylon, and the bricks are stamped with the name of an independent king, of which, as it is expressed entirely by monograms, I cannot ascertain the phonetic form¹. At Warka, again, which was known to the Talmudists and early Arabs as the birth-place of Abraham, and which is even named Ur, in the early Arab geographers, thus showing positively that it is the Ur of the Chaldees, and the Orchoe of the Greeks,—at this place the ruins are of a stupendous character, and, judging from the fragments only which I have seen of the bricks, the name of the king is different from any yet known². There are other ruins at Umgehri

(page 41) that he takes the word   for a special title, and draws an inference from the use of this word in the Khorsabad Inscriptions, that the monarch was actual king of Assyria, but only lord paramount of Babylon. If Dr. Hincks, however, will refer to the British Museum series, Pl. 12, l. 9, he will find the term   used as a simple conjunction to connect the names of the two gods  and , and will thus, I think, see sufficient reason for reading the title of the Khorsabad monarch as "king of Assyria and Babylonia."

¹ I have twice visited Niffer, which is in Lat. 32° 7' 3", and Long. 45° 15', and have minutely examined the ruins. The name of the king is   , and the countries over which he rules are called Sarrakam and Kabsikar, both of these names being also found on the Warka bricks, and the latter, slightly varied in the orthography, being repeated on a very remarkable stone in the British Museum, and being also mentioned in the East India-House Inscription, col. 7, l. 15. I consider Kabsikar or Kartsikar to be the Casarea of the Greeks, and  of the Arabs, the name of the province in which Niffer was situated; while Sarrakam may possibly be the Soractæ of Pliny, a most ancient city of Babylonia, which he ascribes to Semiramis. Niffer is mentioned by the early Arab traditionists as one of the four primæval cities of the world, and is also said to have been the original capital of Babylonia. It was the see of a Christian bishopric in comparatively modern times.

² The following extracts from a very ancient and valuable Manuscript in my library, called Tiráz-el-Mejális, will I think, determinately connect the ruins of Warka with the Biblical Ur of the Chaldees, as far/at any rate as local tradition may be trusted. "The traditionists report that Abraham was born at El Warka (الوركاء), in the district of Edh-Dhawábi (الدَّوَابِّي), on the confines of Kaskar, and that his father afterwards moved to Nimrud's capital, which was in the territory of Kutha. As-sudi, however, states, that when the mother of Abraham found herself pregnant, Azer (the Biblical Terah) feared lest

and Umwaweis, not less interesting, and all built of bricks stamped with inscriptions recording the royal founders. In this country, indeed, of Lower Chaldæa, we must look for Taha Dunis, Beth Takkara, Beth Eden, &c., which were flourishing and important cities at the earliest Assyrian period¹.

The neighbouring country of Susiana also is rich in ancient sites. It would be particularly interesting to excavate the great mound of Susa, for an obelisk which is still lying on the mound, and which bears a long inscription of king Susra², attests the existence of sculptured slabs, and there are also good grounds for supposing we might find bilingual legends, that is, hieroglyphic legends with Cuneiform translations, a monument of this class having certainly been preserved at Susa until within the last few years. The Cuneiform character, however, employed at Susa, is the farthest removed of any from the original Assyrian type, and as the language also appears to be quite different from Babylonian,—not even as I think of the Semitic family, the decipherment of the inscriptions would require a distinct and very laborious study.

There is still one more class of inscriptions, in a variety of the Assyrian character, which I term Elymæan. They are found in

the child should perish; so he went out with her to a country between Kufa and Wasit, which was called Ur (𐎶𐎵), and concealed her in a cave, where she was delivered." Strabo mentions the Chaldæans of Orchoe in conjunction with those of Borsippa, and the city is noticed by all the geographers. I have not met with any Cuneiform name that will suit the Greek or Arabic orthography, unless it be the city of 𐎶𐎵 𐎶𐎵𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵, mentioned in the Inscription on Bellino's Cylinder, side 3, l. 28; and I cannot venture to draw any conclusion from a single notice. Mr. Loftus is at present employed in excavating the ruins of Warka, and will soon probably communicate to the world some account of his discoveries.

¹ It should be remembered that Arrian places the tombs of the ancient Assyrian kings in this particular quarter, and that in the Peutingerian tables the same monuments are laid down with a precision that can leave no doubt of their having once existed, in the marshes south of Babylon. The Arabs, also, have very remarkable notices regarding Atet, Ba-nikāya, Hakeh, Haffeh and other ancient sites in this vicinity, of which nothing is at present known.

² The Cuneiform orthography of the name is 𐎶𐎵 𐎶𐎵 𐎶𐎵, and the father's name is perhaps Tarbadus 𐎶𐎵 𐎶𐎵 𐎶𐎵, though it is not easy to distinguish some of the characters. It would be impossible, I may add, to publish this Inscription without casting a new type, the characters being fully as complicated as the forms employed in Babylonian and Assyrian Hieratic.

Elymais proper, and as in all probability they merely record the actions of provincial governors, or of kings tributary to Susa, the contents of them would hardly prove of any extraordinary interest. The character of these inscriptions is sensibly modified from the Assyrian and Babylonian type, and varies equally much from the character employed at the neighbouring city of Susa, yet it is not very difficult to be deciphered, and if the language were only approximately known, the general contents of the legends might be discovered. I can make nothing, however, of the language. It appears to me to be Scythic, rather than Semitic or Indo-European, but the materials are too scanty to afford grounds for any trustworthy analysis¹.

I have thus, I believe, cursorily noticed all the various classes of Cuneiform Inscriptions, connected with the Assyrian type. Undoubtedly, through the partial intelligence which we have as yet alone acquired of their contents, a most important avenue has been opened to our knowledge of the ancient world. Nations whom we have hitherto viewed exclusively through the dim medium of myth, or of tradition, now take their definite places in history; but before we can affiliate these nations on any sure ethnological grounds—before we can trace their progress to civilization or their relapse into barbarism—before we can estimate the social phases through which they have passed—before we can fix their chronology, identify their monarchs, or even individualize each king's career, much patient labour must be encountered—much ingenuity must be exercised—much care must be bestowed on collateral, as well as intrinsic evidence, and above all, instead of the fragmentary materials which are at present alone open to our research, we must have consecutive monumental data, extending at least, over the ten centuries which preceded the reign of Cyrus the Great.

¹ See British Museum series, Pls. 31, 32, and 36, 37. I perceive from a foot note in page 62 of Dr. Hincks's paper on the Khorsabad Inscriptions, that he has also observed the apparent similarity between the language of the Elymaean Inscriptions and that of the second column of the trilingual tablets, though he admits neither one nor the other to be of the Scythic family. I shall publish the Behistun translations in the so-called Median dialect with all convenient dispatch, and the question of lingual type can hardly remain after that a subject of much controversy. Whether at the same time the Elymaean language was really of the same family I am not prepared to say, without a more careful examination of the Inscriptions than I have yet been able to undertake.

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NOTE

ON

THE PERSIAN INSCRIPTIONS AT BEHISTUN.

BY MAJOR RAWLINSON.

WHEN I last visited Behistun for the purpose of taking casts and copies of all such portions of the Median and Babylonian translations of the record of Darius as are in any degree legible, I also carefully collated with the writing on the rock the whole of the Persian text, as it is lithographed in the Society's Journal, examining the doubtful passages under every possible variety of light, and testing generally the accuracy of the explanatory notes, which accompanied the original publication. I am thus enabled to furnish a tolerably extensive list of Errata, according to which, parties in possession of Part I., Vol. X., of the Society's Journal, would do well to correct the Transcript in Roman characters of the Behistun Inscription, which immediately follows the Cuneiform text.

February 1, 1850.

COLUMN I.

Line 15.—It is very probable that 𐎶𐎶𐎶 𐎶𐎶 𐎶, *Máda*, Media, may intervene between *Yuna* and *Armina*. There is room for the word in the fissure, and the Median copy has also a name between *Ionía* and *Armenia*, of which the initial character appears to be an M. In the Babylonian, the name would occur at the commencement of the line, and is entirely lost.

Line 16.—Sogdiana seems to be written 𐎶𐎶𐎶 𐎶𐎶 𐎶𐎶 𐎶𐎶 𐎶, *Suguda*, as at Nakhsh-i-Rustam; the two last letters are certain, and the three former may be faintly traced in the cleft. The 𐎶𐎶 𐎶𐎶, which I formerly supposed to terminate the name of *Sugdâ*, belongs in reality to a distinct name *Gadâra*, which follows that of Sog-

diana. The latter part of the line therefore should be corrected to 𐎠 𐎡𐎴 𐎧𐎺 𐎧𐎺𐎠 𐎧𐎺 𐎠 𐎠𐎵 𐎠 𐎠𐎵 𐎡𐎴 𐎡𐎴 𐎡𐎴 𐎡𐎴, *Suguda Gaddra Sa*. In the Median, the name of *Gaddra* is entirely lost, and, singularly enough, the Babylonian employs the synonym of *Paruparissanna*, apparently for *Παρονάρισος*. These restorations are valuable in showing that the Islands of the Mediterranean were considered to form a distinct Satrapy, the *tyiya darayahyá*, in addition to Media and Gandaritis, making up the exact number of twenty-three, which is given as the total of the provinces of the Empire.

Line 27.—For 𐎡𐎴 𐎡𐎴 𐎠𐎵 𐎡𐎴𐎠 *pariwa*, read 𐎡𐎴 𐎡𐎴 𐎠𐎵 𐎡𐎴𐎠 *pasáwa*. The phrase, therefore, must be understood to apply generally to the record that follows, rather than to that particular portion of it which describes the actions of Darius prior to his accession to the throne.

Line 32.—The word 𐎠𐎵 𐎠𐎵𐎠 𐎠𐎵 𐎠𐎵 *azdá* can be made out with tolerable certainty. I believe it to signify “unknown.”

Line 37.—The name of the month *Viyakhana* is correctly given.

Line 64.—*Niyatřárayam* is correct, but the last letter of the line is 𐎠𐎵, rather than 𐎠𐎵, and the word, therefore, which I suppose to to signify “religious rites,” must be read as *Abácharish*.



Line 82.—The concluding words of the line, *basta ánayatá abiya máam*, regarding which I was formerly in doubt, are found to be correct.



Line 86.—There is only one character wanting in the word *makáúwa*; and the following verb is *awákanam*, signifying probably, “I brought near,” from 𐎠𐎵 “to approach,” preceded by the particle 𐎠𐎵



Line 88.—The word following *Tigrám*, and signifying “I crossed over,” can be made out as 𐎠𐎵 𐎠𐎵 𐎠𐎵 𐎡𐎴𐎠 𐎡𐎴𐎠 𐎠𐎵 𐎡𐎴𐎠 *Viyatarayám*: and the next word is *awadá*, “there,” instead of *awam*, “that.”





COLUMN II.


Neither in line 26 nor in line 36 can the numeral representing the monthly date be depended on. The Median copy gives in the former passage 28, and in the latter 8.

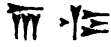
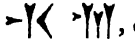
Line 44.—I trace the following letters  in the name of the Armenian fort near which Dadarses fought his third battle. And I infer from the Median and Babylonian orthographies of the title, that the two characters obliterated in the Persian text must be  the entire name reading *Uhyâma*.

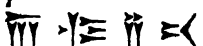
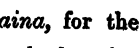

Line 65.—Correct  to  for the initial character of the name of the Median city, which should be thus read as *Kudrush*, instead of *Gudrush*. *Gudrush*

Line 69.—The second word can be made out sufficiently clearly to be , which should be read probably as *Frawartish*, to distinguish it from the nominative *Frawartish*. The name of the month also that follows is , *Adukanaish*, the genitive case of a theme in *i*.

Line 73.—The letters  in *tyipatiya*, which I have given as a restoration, are certain, and the line continues *Frawartish agarbata anayatâ*, the only doubtful point being whether *agarbata* may end in  or . Whichever at the same time be the true termination, the two verbs must necessarily be in the same tense, the passive imperfect, and if the final  be suppressed, *agarbata* may be compared with *awajata*. (Col. I., l. 32.)

Line 74.—The imperfect word which I have conjectured to signify "lips," but which, as a singular noun, I now prefer translating "tongue," terminates in , and there appear to be two characters wanting at the commencement.

Line 75.—The true orthography of the third word is  , *awajam*.

Line 76.—The restoration of   *awaina*, for the second word, is certain. The name of Ecbatana is put in the locative case, and reads  *Hagamatâ*.

naiya: *awadāshim*, conjecturally inserted in my former text, must be expunged, and the following word must be read *uzamayāpatiya*, the third character being verified as an *m* 𐎠𐎶𐎶, by a comparison of the passages in which the term occurs. The translation which I have given of *crucifixum* is undoubted; for the Babylonian text employs the usual Semitic term for "a cross;" but I am quite unable to trace the Persian etymology.

Line 78. — The final word of the thirteenth paragraph is 𐎶𐎶𐎶 𐎶𐎶𐎶 𐎶𐎶𐎶 𐎶𐎶𐎶 𐎶𐎶𐎶 *frāhajam*, which must certainly refer to some ignoble form of capital punishment, and which I would propose therefore to translate, "I hanged," or "I caused to be hung," comparing the Cuneiform root *haja* with the Sans. 𑖦𑖯𑖪𑖯, which with the particle *awa* prefixed, instead of *pra* or *fra*, gives the sense of "hanging down from" or "suspending." A contrast is certainly intended to be drawn between the execution of the royal rebel Phraortes upon a cross, and the less honourable fate reserved for his followers. The Median copy translates the term *frāhajam* by a periphrasis which I am quite unable to explain.

Line 88.—Omit *utā*, restored conjecturally between *agarbāya* and *ānaya*: the two verbs are placed in apposition.

Line 89.—The mutilated word between *utāshaiya* and *awajam* consists of four letters, of which the two last are 𐎶𐎶 𐎶𐎶.

Line 91.—For *uzatayāpatiya* read *uzamayāpatiya*, as in line 76. The entire word can be traced upon the rock, though indistinctly.

Line 92 —The following fragments have been recovered of the sixteenth paragraph, and they entirely confirm the translation given from the Median text, in the Society's Journal, Vol. X., p. 228.

Line 92.—*Thātiya Dārayawush khshāyathiya*: *Parthwa utā War-*
Dicit Darius rex Parthia et Hyr-

Line 93.—*kāna* - - - - - *wa* - - - - - *Frawartaiš* - -
cania rebelles fiebant; hæ provinciæ Phraortis

- - *agubātā*: *Vištāspa manā pitā h*
appellabantur: *Hystaspes, meus pater* -

Line 94.— - - - - - *kāra awahar* - - - - - *ātara*:
adversus eum res - - - - - - - - - - - ?

pasdwa Vištāspa ab
postea Hystaspes cum

Line 95.— - - - - *anushiya* - - - *aya*: *Vispauz* - -
copiis, quæ ei sub iugo erant exivit?: *Hispoastes*

tish nāma warda
nomine oppi-

Line 96.—*nam dá hamaranam akunawa . . .*
dum Parthicum, eo loco praelium commisere.

Lines 97 and 98 are entirely lost, with the exception of the concluding phrase, *awathásham hamaranam kartam*
itâ illis praelium commissum.

COLUMN III.

[illegible]

Lines 14 and 18.—On a careful examination of the rock it proves that *pridiya* and *Atriyadiya* are both written with character རྩྭ, as in all other passages, and the grounds therefore on which I was formerly led to confound that character with རྩྭ no longer exist.

Line 52.—The final letter of *awadashish* is correctly given as 𐎠𐎡𐎢𐎣𐎤𐎥𐎦𐎧𐎨𐎩𐎪𐎫𐎬𐎭𐎮𐎯𐎰𐎱𐎲𐎳𐎴𐎵𐎶𐎷𐎸𐎹𐎺𐎻𐎼𐎽𐎾𐎿𐏀𐏁𐏂𐏃𐏄𐏅𐏆𐏇𐏈𐏉𐏊𐏋𐏌𐏍𐏎𐏏𐏐𐏑𐏒𐏓𐏔𐏕𐏖𐏗𐏘𐏙𐏚𐏛𐏜𐏝𐏞𐏟𐏠𐏡𐏢𐏣𐏤𐏥𐏦𐏧𐏨𐏩𐏪𐏫𐏬𐏭𐏮𐏯𐏰𐏱𐏲𐏳𐏴𐏵𐏶𐏷𐏸𐏹𐏺𐏻𐏼𐏽𐏾𐏿𐐀𐐁𐐂𐐃𐐄𐐅𐐆𐐇𐐈𐐉𐐊𐐋𐐌𐐍𐐎𐐏𐐐𐐑𐐒𐐓𐐔𐐕𐐖𐐗𐐘𐐙𐐚𐐛𐐜𐐝𐐞𐐟𐐠𐐡𐐢𐐣𐐤𐐥𐐦𐐧𐐨𐐩𐐪𐐫𐐬𐐭𐐮𐐯𐐰𐐱𐐲𐐳𐐴𐐵𐐶𐐷𐐸𐐹𐐺𐐻𐐼𐐽𐐾𐐿𐑀𐑁𐑂𐑃𐑄𐑅𐑆𐑇𐑈𐑉𐑊𐑋𐑌𐑍𐑎𐑏𐑐𐑑𐑒𐑓𐑔𐑕𐑖𐑗𐑘𐑙𐑚𐑛𐑜𐑝𐑞𐑟𐑠𐑡𐑢𐑣𐑤𐑥𐑦𐑧𐑨𐑩𐑪𐑫𐑬𐑭𐑮𐑯𐑰𐑱𐑲𐑳𐑴𐑵𐑶𐑷𐑸𐑹𐑺𐑻𐑼𐑽𐑾𐑿𐒀𐒁𐒂𐒃𐒄𐒅𐒆𐒇𐒈𐒉𐒊𐒋𐒌𐒍𐒎𐒏𐒐𐒑𐒒𐒓𐒔𐒕𐒖𐒗𐒘𐒙𐒚𐒛𐒜𐒝𐒞𐒟𐒠𐒡𐒢𐒣𐒤𐒥𐒦𐒧𐒨𐒩𐒪𐒫𐒬𐒭𐒮𐒯𐒰𐒱𐒲𐒳𐒴𐒵𐒶𐒷𐒸𐒹𐒺𐒻𐒼𐒽𐒾𐒿𐓀𐓁𐓂𐓃𐓄𐓅𐓆𐓇𐓈𐓉𐓊𐓋𐓌𐓍𐓎𐓏𐓐𐓑𐓒𐓓𐓔𐓕𐓖𐓗𐓘𐓙𐓚𐓛𐓜𐓝𐓞𐓟𐓠𐓡𐓢𐓣𐓤𐓥𐓦𐓧𐓨𐓩𐓪𐓫𐓬𐓭𐓮𐓯𐓰𐓱𐓲𐓳𐓴𐓵𐓶𐓷𐓸𐓹𐓺𐓻𐓼𐓽𐓾𐓿𐔀𐔁𐔂𐔃𐔄𐔅𐔆𐔇𐔈𐔉𐔊𐔋𐔌𐔍𐔎𐔏𐔐𐔑𐔒𐔓𐔔𐔕𐔖𐔗𐔘𐔙𐔚𐔛𐔜𐔝𐔞𐔟𐔠𐔡𐔢𐔣𐔤𐔥𐔦𐔧𐔨𐔩𐔪𐔫𐔬𐔭𐔮𐔯𐔰𐔱𐔲𐔳𐔴𐔵𐔶𐔷𐔸𐔹𐔺𐔻𐔼𐔽𐔾𐔿𐕀𐕁𐕂𐕃𐕄𐕅𐕆𐕇𐕈𐕉𐕊𐕋𐕌𐕍𐕎𐕏𐕐𐕑𐕒𐕓𐕔𐕕𐕖𐕗𐕘𐕙𐕚𐕛𐕜𐕝𐕞𐕟𐕠𐕡𐕢𐕣𐕤𐕥𐕦𐕧𐕨𐕩𐕪𐕫𐕬𐕭𐕮𐕯𐕰𐕱𐕲𐕳𐕴𐕵𐕶𐕷𐕸𐕹𐕺𐕻𐕼𐕽𐕾𐕿𐖀𐖁𐖂𐖃𐖄𐖅𐖆𐖇𐖈𐖉𐖊𐖋𐖌𐖍𐖎𐖏𐖐𐖑𐖒𐖓𐖔𐖕𐖖𐖗𐖘𐖙𐖚𐖛𐖜𐖝𐖞𐖟𐖠𐖡𐖢𐖣𐖤𐖥𐖦𐖧𐖨𐖩𐖪𐖫𐖬𐖭𐖮𐖯𐖰𐖱𐖲𐖳𐖴𐖵𐖶𐖷𐖸𐖹𐖺𐖻𐖼𐖽𐖾𐖿𐗀𐗁𐗂𐗃𐗄𐗅𐗆𐗇𐗈𐗉𐗊𐗋𐗌𐗍𐗎𐗏𐗐𐗑𐗒𐗓𐗔𐗕𐗖𐗗𐗘𐗙𐗚𐗛𐗜𐗝𐗞𐗟𐗠𐗡𐗢𐗣𐗤𐗥𐗦𐗧𐗨𐗩𐗪𐗫𐗬𐗭𐗮𐗯𐗰𐗱𐗲𐗳𐗴𐗵𐗶𐗷𐗸𐗹𐗺𐗻𐗼𐗽𐗾𐗿𐘀𐘁𐘂𐘃𐘄𐘅𐘆𐘇𐘈𐘉𐘊𐘋𐘌𐘍𐘎𐘏𐘐𐘑𐘒𐘓𐘔𐘕𐘖𐘗𐘘𐘙𐘚𐘛𐘜𐘝𐘞𐘟𐘠𐘡𐘢𐘣𐘤𐘥𐘦𐘧𐘨𐘩𐘪𐘫𐘬𐘭𐘮𐘯𐘰𐘱𐘲𐘳𐘴𐘵𐘶𐘷𐘸𐘹𐘺𐘻𐘼𐘽𐘾𐘿𐙀𐙁𐙂𐙃𐙄𐙅𐙆𐙇𐙈𐙉𐙊𐙋𐙌𐙍𐙎𐙏𐙐𐙑𐙒𐙓𐙔𐙕𐙖𐙗𐙘𐙙𐙚𐙛𐙜𐙝𐙞𐙟𐙠𐙡𐙢𐙣𐙤𐙥𐙦𐙧𐙨𐙩𐙪𐙫𐙬𐙭𐙮𐙯𐙰𐙱𐙲𐙳𐙴𐙵𐙶𐙷𐙸𐙹𐙺𐙻𐙼𐙽𐙾𐙿𐚀𐚁𐚂𐚃𐚄𐚅𐚆𐚇𐚈𐚉𐚊𐚋𐚌𐚍𐚎𐚏𐚐𐚑𐚒𐚓𐚔𐚕𐚖𐚗𐚘𐚙𐚚𐚛𐚜𐚝𐚞𐚟𐚠𐚡𐚢𐚣𐚤𐚥𐚦𐚧𐚨𐚩𐚪𐚫𐚬𐚭𐚮𐚯𐚰𐚱𐚲𐚳𐚴𐚵𐚶𐚷𐚸𐚹𐚺𐚻𐚼𐚽𐚾𐚿𐛀𐛁𐛂𐛃𐛄𐛅𐛆𐛇𐛈𐛉𐛊𐛋𐛌𐛍𐛎𐛏𐛐𐛑𐛒𐛓𐛔𐛕𐛖𐛗𐛘𐛙𐛚𐛛𐛜𐛝𐛞𐛟𐛠𐛡𐛢𐛣𐛤𐛥𐛦𐛧𐛨𐛩𐛪𐛫𐛬𐛭𐛮𐛯𐛰𐛱𐛲𐛳𐛴𐛵𐛶𐛷𐛸𐛹𐛺𐛻𐛼𐛽𐛾𐛿𐜀𐜁𐜂𐜃𐜄𐜅𐜆𐜇𐜈𐜉𐜊𐜋𐜌𐜍𐜎𐜏𐜐𐜑𐜒𐜓𐜔𐜕𐜖𐜗𐜘𐜙𐜚𐜛𐜜𐜝𐜞𐜟𐜠𐜡𐜢𐜣𐜤𐜥𐜦𐜧𐜨𐜩𐜪𐜫𐜬𐜭𐜮𐜯𐜰𐜱𐜲𐜳𐜴𐜵𐜶𐜷𐜸𐜹𐜺𐜻𐜼𐜽𐜾𐜿𐝀𐝁𐝂𐝃𐝄𐝅𐝆𐝇𐝈𐝉𐝊𐝋𐝌𐝍𐝎𐝏𐝐𐝑𐝒𐝓𐝔𐝕𐝖𐝗𐝘𐝙𐝚𐝛𐝜𐝝𐝞𐝟𐝠𐝡𐝢𐝣𐝤𐝥𐝦𐝧𐝨𐝩𐝪𐝫𐝬𐝭𐝮𐝯𐝰𐝱𐝲𐝳𐝴𐝵𐝶𐝷𐝸𐝹𐝺𐝻𐝼𐝽𐝾𐝿𐞀𐞁𐞂𐞃𐞄𐞅𐞆𐞇𐞈𐞉𐞊𐞋𐞌𐞍𐞎𐞏𐞐𐞑𐞒𐞓𐞔𐞕𐞖𐞗𐞘

Line 72.—The line appears to end thus:—

[illegible]

Line 78.—For *Nañditahya* read *Hañditahya*, the initial letter being $\langle \text{𑀭} \rangle$ and the following character 𑀮 , which also occurs in *Dubdāṇa*.

I found it impossible to recover any more than is already published of the last paragraph of this column.

COLUMN IV.

Line 5.—The fourth clause is to be read *pasāwa yathā kshakā-yathiyā hamiriyā abawa, &c.*, “then as the kings rose in revolt against me I fought nineteen battles.”

Line 12.—The word *mand*, which I before considered to be doubtful, is certainly found at the end of the fourteenth clause.

Line 34.—The second clause requires a slight emendation, which, however, is of consequence. $\overline{\text{𐎠}} \overline{\text{𐎠𐎹}}$ $\overline{\text{𐎠𐎹}}$ $\overline{\text{𐎠𐎹}}$ $\overline{\text{𐎠𐎹}}$ $\overline{\text{𐎠𐎹}}$ is a single word, and should probably be completed to *darugadiwa*, and a word of five letters, of which the two last are $\overline{\text{𐎠𐎹}}$ $\overline{\text{𐎠𐎹}}$ or $\overline{\text{𐎠𐎹}}$ $\overline{\text{𐎠𐎹}}$ then intervenes before *akunaush*, so that I think the meaning must be, "The god of lies created (evil spirits) in order that these evil spirits should deceive the nation." In the third clause, also, although the only correction required in the text is the substitution of the word ending in $\overline{\text{𐎠𐎹}}$ $\overline{\text{𐎠𐎹}}$ or $\overline{\text{𐎠𐎹}}$ $\overline{\text{𐎠𐎹}}$, as in the preceding line, for the term *daruga*, which in my former copy was conjecturally inserted, I should suppose the noun commencing with $\overline{\text{𐎠𐎹}}$ $\overline{\text{𐎠𐎹}}$ to refer to the god of truth, and should wish therefore to translate, "afterwards the god of truth brought these evil spirits in subjection to me." In the last clause, too, the word commencing with $\overline{\text{𐎠𐎹}}$ $\overline{\text{𐎠𐎹}}$ and which I suppose to be *diwa*, "a god," again occurs, but there certainly is not sufficient room for the verb *akunaush*.

Line 38.—For *arika*, conjecturally given in the old text, read $\overline{\text{𐎠}} \overline{\text{𐎠𐎹}}$ $\overline{\text{𐎠𐎹}}$ $\overline{\text{𐎠𐎹}}$ $\overline{\text{𐎠𐎹}}$ $\overline{\text{𐎠𐎹}}$ *daraujana*, "a liar." The word can be indistinctly traced upon the rock, and the Median and Babylonian equivalents, from their near relation to the words used in other passages for the Persian *darauga*, *adurujiya*, &c., confirm the identity.

Line 43.—The last word of the sixth paragraph may, I think, be restored as *durujiyáhya* with some confidence. At any rate the characters $\overline{\text{𐎠𐎹}}$ $\overline{\text{𐎠𐎹}}$ can be distinguished before *iyáhya*.

Line 44.—The word between *Auramazdá* and *yathá* is certainly either *maiyya* or *taiyya*, the initial character being the only one subject to doubt, but I can suggest no other rendering than that already given.

Line 46.—The word which follows *Auramazdáha* cannot be *tyamaiya*, for the four last characters are certainly $\overline{\text{𐎠𐎹}}$ $\overline{\text{𐎠𐎹}}$ $\overline{\text{𐎠𐎹}}$ $\overline{\text{𐎠𐎹}}$; but I have no better reading to propose.

Line 49.—*Nishida* is a doubtful orthography; the last letter is more like 𑖦𑖦, but *nisham* or *nishma* will hardly give any suitable meaning.

Line 51.—The concluding words of the line are *nīya astiya kartam*, "non est factum;" so that I cannot have caught the true sense of the paragraph. The faultiness of the text, however, renders it almost hopeless to attempt to recover the meaning.

Line 52.—The word *thrada* which I have proposed to insert between *hamahyāyā* and *duwartam* must be expunged; and this alteration, together with the correction noticed in the last line, will necessitate the recasting of the entire paragraph.

Line 53.—(𐎠𐎡𐎴 𐎠𐎡𐎴 𐎠𐎡𐎴 *nuram*, may be read with certainty as the termination of the word which follows *khsháyathiya*: the commencement of the word is altogether lost, but it must necessarily signify, “descendants” or “posterity.”

Line 55.—This line was omitted in my former copy; it runs thus:—

[illegible]

and the third clause, therefore of the paragraph will read:

yadiya imám hadugám niya apagauidiyáhya kárahya tháhya;
si hoc edictum non celes, regno dices;

Auramazdá thuwám daushta biyá, &c.











Oromasdes tibi amicus sit.

The word *apagaudiyādhya* can only be traced with difficulty; but the other portions of the writing are undoubted: *hadugām* I have rendered "edict," but it perhaps properly signifies "a connected narrative," being an analogous form to the Sanskrit **सहोक्ति**, compounded of **सह**, "with," and **उक्ति**, "saying." *Kārahyā thāhya* also, I think is evidently a continuation rather than the complement of the condition, and the sentence therefore will signify, "If thou shalt not conceal this

terms of which the etymology is most obscure, and the lacunæ, moreover, which still exist, render it impossible to derive assistance from the context.

Line 69.—The word which I have translated “protége,” appears to read $\overline{\text{𐎧}} \text{ } \overleftarrow{\text{𐎠}} \text{ } \overline{\text{𐎢}}$ 𐎥𐎶 , *daushtá*, which must be the 2d pers. sing. of the imper. of a verb of the 1st conj. signifying “to befriend.” A verbal noun *daushtá*, from the same root, occurs in several other passages; and the دوست *dost*, “a friend,” of modern Persian, confirms the explanation. See also the Vocabulary under the head *jaiwá*, for the application of the *guna* to the radical vowel in all the special tenses of roots of the 1st conj. The third clause of this paragraph reads, $\overline{\text{𐎧}} \text{ } \text{𐎡𐎴} \text{ } \overline{\text{𐎧}} \text{ } \overleftarrow{\text{𐎠}} \text{ } \text{𐎱} \text{ } \overline{\text{𐎧}} \text{ } \overleftarrow{\text{𐎠}} \text{ } \overline{\text{𐎧}} \text{ } \text{𐎵𐎽} \text{ } \overline{\text{𐎧}} \text{ } \text{𐎥𐎶} \text{ } \overline{\text{𐎧}} \text{ } \text{𐎥𐎶}$
 $\overline{\text{𐎧}} \text{ } \overleftarrow{\text{𐎠}} \text{ } \text{𐎱} \text{ } \overline{\text{𐎧}} \text{ } \text{𐎥𐎶} \text{ } \text{𐎡𐎴} \text{ } \overline{\text{𐎧}}$, *avaiya ahifrashtádiya parasá*, which I translate “destroy them with the destruction of the sword,” comparing *ahi*, which enters into the composition of *ahifrashtádiya*, with the Sans. अहिः. The grammatical condition of the compound, as explained in the Vocabulary, p. 6, is not affected by this substitution of *ahi*, “a sword,” for the particle *ati*.

Line 71.—The true orthography of the word signifying “I have written,” is *niyapisham*. The last letter of the line also, which I have given as $\overline{\Pi}$, is very doubtful.

Line 72.—I cannot complete with any certainty the word which commences the line, but if its initial character, occurring at the end of the preceding line, be , it may very well represent     , and the whole clause will then read, *yāwā jivāhya, āwā awaiya parikarā*, “as long as thou livest, so long preserve them,” (i. e., the sculptured figures). There is no doubt about the last word of the paragraph, *parikarā*, and I think that the preceding term is    .

Line 73.—This line commences with $\Xi\Upsilon\Upsilon\Upsilon$ Υ Υ Υ , so that *yadiya*, “if,” must be substituted for *yáwá*, “as long as.”

Line 74 also requires much alteration. It reads—

[illegible]

𐎠𐎡𐎢𐎣𐎤𐎥𐎦𐎧𐎨𐎩𐎪𐎫𐎬𐎭𐎮𐎯𐎰𐎱𐎲𐎳𐎴𐎵𐎶𐎷𐎸𐎹𐎺𐎻𐎼𐎽𐎾𐎿𐏀𐏁𐏂𐏃𐏄𐏅𐏆𐏇𐏈𐏉𐏊𐏋𐏌𐏍𐏎𐏏𐏐𐏑𐏒𐏓𐏔𐏕𐏖𐏗𐏘𐏙𐏚𐏛𐏜𐏝𐏞𐏟𐏠𐏡𐏢𐏣𐏤𐏥𐏦𐏧𐏨𐏩𐏪𐏫𐏬𐏭𐏮𐏯𐏰𐏱𐏲𐏳𐏴𐏵𐏶𐏷𐏸𐏹𐏺𐏻𐏼𐏽𐏾𐏿𐐀𐐁𐐂𐐃𐐄𐐅𐐆𐐇𐐈𐐉𐐊𐐋𐐌𐐍𐐎𐐏𐐐𐐑𐐒𐐓𐐔𐐕𐐖𐐗𐐘𐐙𐐚𐐛𐐜𐐝𐐞𐐟𐐠𐐡𐐢𐐣𐐤𐐥𐐦𐐧𐐨𐐩𐐪𐐫𐐬𐐭𐐮𐐯𐐰𐐱𐐲𐐳𐐴𐐵𐐶𐐷𐐸𐐹𐐺𐐻𐐼𐐽𐐾𐐿𐑀𐑁𐑂𐑃𐑄𐑅𐑆𐑇𐑈𐑉𐑊𐑋𐑌𐑍𐑎𐑏𐑐𐑑𐑒𐑓𐑔𐑕𐑖𐑗𐑘𐑙𐑚𐑛𐑜𐑝𐑞𐑟𐑠𐑡𐑢𐑣𐑤𐑥𐑦𐑧𐑨𐑩𐑪𐑫𐑬𐑭𐑮𐑯𐑰𐑱𐑲𐑳𐑴𐑵𐑶𐑷𐑸𐑹𐑺𐑻𐑼𐑽𐑾𐑿𐒀𐒁𐒂𐒃𐒄𐒅𐒆𐒇𐒈𐒉𐒊𐒋𐒌𐒍𐒎𐒏𐒐𐒑𐒒𐒓𐒔𐒕𐒖𐒗𐒘𐒙𐒚𐒛𐒜𐒝𐒞𐒟𐒠𐒡𐒢𐒣𐒤𐒥𐒦𐒧𐒨𐒩𐒪𐒫𐒬𐒭𐒮𐒯𐒰𐒱𐒲𐒳𐒴𐒵𐒶𐒷𐒸𐒹𐒺𐒻𐒼𐒽𐒾𐒿𐓀𐓁𐓂𐓃𐓄𐓅𐓆𐓇𐓈𐓉𐓊𐓋𐓌𐓍𐓎𐓏𐓐𐓑𐓒𐓓𐓔𐓕𐓖𐓗𐓘𐓙𐓚𐓛𐓜𐓝𐓞𐓟𐓠𐓡𐓢𐓣𐓤𐓥𐓦𐓧𐓨𐓩𐓪𐓫𐓬𐓭𐓮𐓯𐓰𐓱𐓲𐓳𐓴𐓵𐓶𐓷𐓸𐓹𐓺𐓻𐓼𐓽𐓾𐓿𐔀𐔁𐔂𐔃𐔄𐔅𐔆𐔇𐔈𐔉𐔊𐔋𐔌𐔍𐔎𐔏𐔐𐔑𐔒𐔓𐔔𐔕𐔖𐔗𐔘𐔙𐔚𐔛𐔜𐔝𐔞𐔟𐔠𐔡𐔢𐔣𐔤𐔥𐔦𐔧𐔨𐔩𐔪𐔫𐔬𐔭𐔮𐔯𐔰𐔱𐔲𐔳𐔴𐔵𐔶𐔷𐔸𐔹𐔺𐔻𐔼𐔽𐔾𐔿𐕀𐕁𐕂𐕃𐕄𐕅𐕆𐕇𐕈𐕉𐕊𐕋𐕌𐕍𐕎𐕏𐕐𐕑𐕒𐕓𐕔𐕕𐕖𐕗𐕘𐕙𐕚𐕛𐕜𐕝𐕞𐕟𐕠𐕡𐕢𐕣𐕤𐕥𐕦𐕧𐕨𐕩𐕪𐕫𐕬𐕭𐕮𐕯𐕰𐕱𐕲𐕳𐕴𐕵𐕶𐕷𐕸𐕹𐕺𐕻𐕼𐕽𐕾𐕿𐖀𐖁𐖂𐖃𐖄𐖅𐖆𐖇𐖈𐖉𐖊𐖋𐖌𐖍𐖎𐖏𐖐𐖑𐖒𐖓𐖔𐖕𐖖𐖗𐖘𐖙𐖚𐖛𐖜𐖝𐖞𐖟𐖠𐖡𐖢𐖣𐖤𐖥𐖦𐖧𐖨𐖩𐖪𐖫𐖬𐖭𐖮𐖯𐖰𐖱𐖲𐖳𐖴𐖵𐖶𐖷𐖸𐖹𐖺𐖻𐖼𐖽𐖾𐖿𐗀𐗁𐗂𐗃𐗄𐗅𐗆𐗇𐗈𐗉𐗊𐗋𐗌𐗍𐗎𐗏𐗐𐗑𐗒𐗓𐗔𐗕𐗖𐗗𐗘𐗙𐗚𐗛𐗜𐗝𐗞𐗟𐗠𐗡𐗢𐗣𐗤𐗥𐗦𐗧𐗨𐗩𐗪𐗫𐗬𐗭𐗮𐗯𐗰𐗱𐗲𐗳𐗴𐗵𐗶𐗷𐗸𐗹𐗺𐗻𐗼𐗽𐗾𐗿𐘀𐘁𐘂𐘃𐘄𐘅𐘆𐘇𐘈𐘉𐘊𐘋𐘌𐘍𐘎𐘏𐘐𐘑𐘒𐘓𐘔𐘕𐘖𐘗𐘘𐘙𐘚𐘛𐘜𐘝𐘞𐘟𐘠𐘡𐘢𐘣𐘤𐘥𐘦𐘧𐘨𐘩𐘪𐘫𐘬𐘭𐘮𐘯𐘰𐘱𐘲𐘳𐘴𐘵𐘶𐘷𐘸𐘹𐘺𐘻𐘼𐘽𐘾𐘿𐙀𐙁𐙂𐙃𐙄𐙅𐙆𐙇𐙈𐙉𐙊𐙋𐙌𐙍𐙎𐙏𐙐𐙑𐙒𐙓𐙔𐙕𐙖𐙗𐙘𐙙𐙚𐙛𐙜𐙝𐙞𐙟𐙠𐙡𐙢𐙣𐙤𐙥𐙦𐙧𐙨𐙩𐙪𐙫𐙬𐙭𐙮𐙯𐙰𐙱𐙲𐙳𐙴𐙵𐙶𐙷𐙸𐙹𐙺𐙻𐙼𐙽𐙾𐙿𐚀𐚁𐚂𐚃𐚄𐚅𐚆𐚇𐚈𐚉𐚊𐚋𐚌𐚍𐚎𐚏𐚐𐚑𐚒𐚓𐚔𐚕𐚖𐚗𐚘𐚙𐚚𐚛𐚜𐚝𐚞𐚟𐚠𐚡𐚢𐚣𐚤𐚥𐚦𐚧𐚨𐚩𐚪𐚫𐚬𐚭𐚮𐚯𐚰𐚱𐚲𐚳𐚴𐚵𐚶𐚷𐚸𐚹𐚺𐚻𐚼𐚽𐚾𐚿𐛀𐛁𐛂𐛃𐛄𐛅𐛆𐛇𐛈𐛉𐛊𐛋𐛌𐛍𐛎𐛏𐛐𐛑𐛒𐛓𐛔𐛕𐛖𐛗𐛘𐛙𐛚𐛛𐛜𐛝𐛞𐛟𐛠𐛡𐛢𐛣𐛤𐛥𐛦𐛧𐛨𐛩𐛪𐛫𐛬𐛭𐛮𐛯𐛰𐛱𐛲𐛳𐛴𐛵𐛶𐛷𐛸𐛹𐛺𐛻𐛼𐛽𐛾𐛿𐜀𐜁𐜂𐜃𐜄𐜅𐜆𐜇𐜈𐜉𐜊𐜋𐜌𐜍𐜎𐜏𐜐𐜑𐜒𐜓𐜔𐜕𐜖𐜗𐜘𐜙𐜚𐜛𐜜𐜝𐜞𐜟𐜠𐜡𐜢𐜣𐜤𐜥𐜦𐜧𐜨𐜩𐜪𐜫𐜬𐜭𐜮𐜯𐜰𐜱𐜲𐜳𐜴𐜵𐜶𐜷𐜸𐜹𐜺𐜻𐜼𐜽𐜾𐜿𐝀𐝁𐝂𐝃𐝄𐝅𐝆𐝇𐝈𐝉𐝊𐝋𐝌𐝍𐝎𐝏𐝐𐝑𐝒𐝓𐝔𐝕𐝖𐝗𐝘𐝙𐝚𐝛𐝜𐝝𐝞𐝟𐝠𐝡𐝢𐝣𐝤𐝥𐝦𐝧𐝨𐝩𐝪𐝫𐝬𐝭𐝮𐝯𐝰𐝱𐝲𐝳𐝴𐝵𐝶𐝷𐝸𐝹𐝺𐝻𐝼𐝽𐝾𐝿𐞀𐞁𐞂𐞃𐞄𐞅𐞆𐞇𐞈𐞉𐞊𐞋𐞌𐞍𐞎𐞏𐞐𐞑𐞒𐞓𐞔𐞕𐞖𐞗𐞘𐞙𐞚𐞛𐞜𐞝𐞞𐞟𐞠𐞡𐞢𐞣𐞤𐞥𐞦𐞧𐞨𐞩𐞪𐞫𐞬𐞭𐞮𐞯𐞰𐞱𐞲𐞳𐞴𐞵𐞶𐞷𐞸𐞹𐞺𐞻𐞼𐞽𐞾𐞿𐟀𐟁𐟂𐟃𐟄𐟅𐟆𐟇𐟈𐟉𐟊𐟋𐟌𐟍𐟎𐟏𐟐𐟑𐟒𐟓𐟔𐟕𐟖𐟗𐟘𐟙𐟚𐟛𐟜𐟝𐟞𐟟𐟠𐟡𐟢𐟣𐟤𐟥𐟦𐟧𐟨𐟩𐟪𐟫𐟬𐟭𐟮𐟯𐟰𐟱𐟲𐟳𐟴𐟵𐟶𐟷𐟸𐟹𐟺𐟻𐟼𐟽𐟾𐟿𐠀𐠁𐠂𐠃𐠄𐠅𐠆𐠇𐠈𐠉𐠊𐠋𐠌𐠍𐠎𐠏𐠐𐠑𐠒𐠓𐠔𐠕𐠖𐠗𐠘𐠙𐠚𐠛𐠜𐠝𐠞𐠟𐠠𐠡𐠢𐠣𐠤𐠥𐠦𐠧𐠨𐠩𐠪𐠫𐠬𐠭𐠮𐠯𐠰𐠱𐠲𐠳𐠴𐠵𐠶𐠷𐠸𐠹𐠺𐠻𐠼𐠽𐠾𐠿𐡀𐡁𐡂𐡃𐡄𐡅𐡆𐡇𐡈𐡉𐡊𐡋𐡌𐡍𐡎𐡏𐡐𐡑𐡒𐡓𐡔𐡕𐡖𐡗𐡘𐡙𐡚𐡛𐡜𐡝𐡞𐡟𐡠𐡡𐡢𐡣𐡤𐡥𐡦𐡧𐡨𐡩𐡪𐡫𐡬𐡭𐡮𐡯𐡰𐡱𐡲𐡳𐡴𐡵𐡶𐡷𐡸𐡹𐡺𐡻𐡼𐡽𐡾𐡿𐢀𐢁𐢂𐢃𐢄𐢅𐢆𐢇𐢈𐢉𐢊𐢋𐢌𐢍𐢎𐢏𐢐𐢑𐢒𐢓𐢔𐢕𐢖𐢗𐢘𐢙𐢚𐢛𐢜𐢝𐢞𐢟𐢠𐢡𐢢𐢣𐢤𐢥𐢦𐢧𐢨𐢩𐢪𐢫𐢬𐢭𐢮𐢯𐢰𐢱𐢲𐢳𐢴𐢵𐢶𐢷𐢸𐢹𐢺𐢻𐢼𐢽𐢾𐢿𐣀𐣁𐣂𐣃𐣄𐣅𐣆𐣇𐣈𐣉𐣊𐣋𐣌𐣍𐣎𐣏𐣐𐣑𐣒𐣓𐣔𐣕𐣖𐣗𐣘𐣙𐣚𐣛𐣜𐣝𐣞𐣟𐣠𐣡𐣢𐣣𐣤𐣥𐣦𐣧𐣨𐣩𐣪𐣫𐣬𐣭𐣮𐣯𐣰𐣱𐣲𐣳𐣴𐣵𐣶𐣷𐣸𐣹𐣺𐣻𐣼𐣽𐣾𐣿𐤀𐤁𐤂𐤃𐤄𐤅𐤆𐤇𐤈𐤉𐤊𐤋𐤌𐤍𐤎𐤏𐤐𐤑𐤒𐤓𐤔𐤕𐤖𐤗𐤘𐤙𐤚𐤛𐤜𐤝𐤞𐤟𐤠𐤡𐤢𐤣𐤤𐤥𐤦𐤧𐤨𐤩𐤪𐤫𐤬𐤭𐤮𐤯𐤰𐤱𐤲𐤳𐤴𐤵𐤶𐤷𐤸𐤹𐤺𐤻𐤼𐤽𐤾𐤿𐥀𐥁𐥂𐥃𐥄𐥅𐥆𐥇𐥈𐥉𐥊𐥋𐥌𐥍𐥎𐥏𐥐𐥑𐥒𐥓𐥔𐥕𐥖𐥗𐥘𐥙𐥚𐥛𐥜𐥝𐥞𐥟𐥠𐥡𐥢𐥣𐥤𐥥𐥦𐥧𐥨𐥩𐥪𐥫𐥬𐥭𐥮𐥯𐥰𐥱𐥲𐥳𐥴𐥵𐥶𐥷𐥸𐥹𐥺𐥻𐥼𐥽𐥾𐥿𐦀𐦁𐦂𐦃𐦄𐦅𐦆𐦇𐦈𐦉𐦊𐦋𐦌𐦍𐦎𐦏𐦐𐦑𐦒𐦓𐦔𐦕𐦖𐦗𐦘𐦙𐦚𐦛𐦜𐦝𐦞𐦟𐦠𐦡𐦢𐦣𐦤𐦥𐦦𐦧𐦨𐦩𐦪𐦫𐦬𐦭𐦮𐦯𐦰𐦱𐦲𐦳𐦴𐦵𐦶𐦷𐦸𐦹𐦺𐦻𐦼𐦽𐦾𐦿𐧀𐧁𐧂𐧃𐧄𐧅𐧆𐧇𐧈𐧉𐧊𐧋𐧌𐧍𐧎𐧏𐧐𐧑𐧒𐧓𐧔𐧕𐧖𐧗𐧘𐧙𐧚𐧛𐧜𐧝𐧞𐧟𐧠𐧡𐧢𐧣𐧤𐧥𐧦𐧧𐧨𐧩𐧪𐧫𐧬𐧭𐧮𐧯𐧰𐧱𐧲𐧳𐧴𐧵𐧶𐧷𐧸𐧹𐧺𐧻𐧼𐧽𐧾𐧿𐨀𐨁𐨂𐨃𐨄𐨅𐨆𐨇𐨈𐨉𐨊𐨋𐨌𐨍𐨎𐨏𐨐𐨑𐨒𐨓𐨔𐨕𐨖𐨗𐨘𐨙𐨚𐨛𐨜𐨝𐨞𐨟𐨠𐨡𐨢𐨣𐨤𐨥𐨦𐨧𐨨𐨩𐨪𐨫𐨬𐨭𐨮𐨯𐨰𐨱𐨲𐨳𐨴𐨵𐨶𐨷𐨹𐨺𐨸𐨻𐨼𐨽𐨾𐨿𐩀𐩁𐩂𐩃𐩄𐩅𐩆𐩇𐩈𐩉𐩊𐩋𐩌𐩍𐩎𐩏𐩐𐩑𐩒𐩓𐩔𐩕𐩖𐩗𐩘𐩙𐩚𐩛𐩜𐩝𐩞𐩟𐩠𐩡𐩢𐩣𐩤𐩥𐩦𐩧𐩨𐩩𐩪𐩫𐩬𐩭𐩮𐩯𐩰𐩱𐩲𐩳𐩴𐩵𐩶𐩷𐩸𐩹𐩺𐩻𐩼𐩽𐩾𐩿𐪀𐪁𐪂𐪃𐪄𐪅𐪆𐪇𐪈𐪉𐪊𐪋𐪌𐪍𐪎𐪏𐪐𐪑𐪒𐪓𐪔𐪕𐪖𐪗𐪘𐪙𐪚𐪛𐪜𐪝𐪞𐪟𐪠𐪡𐪢𐪣𐪤𐪥𐪦𐪧𐪨𐪩𐪪𐪫𐪬𐪭𐪮𐪯𐪰𐪱𐪲𐪳𐪴𐪵𐪶𐪷𐪸𐪹𐪺𐪻𐪼𐪽𐪾𐪿𐫀𐫁𐫂𐫃𐫄𐫅𐫆𐫇𐫈𐫉𐫊𐫋𐫌𐫍𐫎𐫏𐫐𐫑𐫒𐫓𐫔𐫕𐫖𐫗𐫘𐫙𐫚𐫛𐫜𐫝𐫞𐫟𐫠𐫡𐫢𐫣𐫤𐫦𐫥𐫧𐫨𐫩𐫪𐫫𐫬𐫭𐫮𐫯𐫰𐫱𐫲𐫳𐫴𐫵𐫶𐫷𐫸𐫹𐫺𐫻𐫼𐫽𐫾𐫿𐬀𐬁𐬂𐬃𐬄𐬅𐬆𐬇𐬈𐬉𐬊𐬋𐬌𐬍𐬎𐬏𐬐𐬑𐬒𐬓𐬔𐬕𐬖𐬗𐬘𐬙𐬚𐬛𐬜𐬝𐬞𐬟𐬠𐬡𐬢𐬣𐬤𐬥𐬦𐬧𐬨𐬩𐬪𐬫𐬬𐬭𐬮𐬯𐬰𐬱𐬲𐬳𐬴𐬵𐬶𐬷𐬸𐬹𐬺𐬻𐬼𐬽𐬾𐬿𐭀𐭁𐭂𐭃𐭄𐭅𐭆𐭇𐭈𐭉𐭊𐭋𐭌𐭍𐭎𐭏𐭐𐭑𐭒𐭓𐭔𐭕𐭖𐭗𐭘𐭙𐭚𐭛𐭜𐭝𐭞𐭟𐭠𐭡𐭢𐭣𐭤𐭥𐭦𐭧𐭨𐭩𐭪𐭫𐭬𐭭𐭮𐭯𐭰𐭱𐭲𐭳𐭴𐭵𐭶𐭷𐭸𐭹𐭺𐭻𐭼𐭽𐭾𐭿𐮀𐮁𐮂𐮃𐮄𐮅𐮆𐮇𐮈𐮉𐮊𐮋𐮌𐮍𐮎𐮏𐮐𐮑𐮒𐮓𐮔𐮕𐮖𐮗𐮘𐮙𐮚𐮛𐮜𐮝𐮞𐮟𐮠𐮡𐮢𐮣𐮤𐮥𐮦𐮧𐮨𐮩𐮪𐮫𐮬𐮭𐮮𐮯𐮰𐮱𐮲𐮳𐮴𐮵𐮶𐮷𐮸𐮹𐮺𐮻𐮼𐮽𐮾𐮿𐯀𐯁𐯂𐯃𐯄𐯅𐯆𐯇𐯈𐯉𐯊𐯋𐯌𐯍𐯎𐯏𐯐𐯑𐯒𐯓𐯔𐯕𐯖𐯗𐯘𐯙𐯚𐯛𐯜𐯝𐯞𐯟𐯠𐯡𐯢𐯣𐯤𐯥𐯦𐯧𐯨𐯩𐯪𐯫𐯬𐯭𐯮𐯯𐯰𐯱𐯲𐯳𐯴𐯵𐯶𐯷𐯸𐯹𐯺𐯻𐯼𐯽𐯾𐯿𐰀𐰁𐰂𐰃𐰄𐰅𐰆𐰇𐰈𐰉𐰊𐰋𐰌𐰍𐰎𐰏𐰐𐰑𐰒𐰓𐰔𐰕𐰖𐰗𐰘𐰙𐰚𐰛𐰜𐰝𐰞𐰟𐰠𐰡𐰢𐰣𐰤𐰥𐰦𐰧𐰨𐰩𐰪𐰫𐰬𐰭𐰮𐰯𐰰𐰱𐰲𐰳𐰴𐰵𐰶𐰷𐰸𐰹𐰺𐰻𐰼𐰽𐰾𐰿𐱀𐱁𐱂𐱃𐱄𐱅𐱆𐱇𐱈𐱉𐱊𐱋𐱌𐱍𐱎𐱏𐱐𐱑𐱒𐱓𐱔𐱕𐱖𐱗𐱘𐱙𐱚𐱛𐱜𐱝𐱞𐱟𐱠𐱡𐱢𐱣𐱤𐱥𐱦𐱧𐱨𐱩𐱪𐱫𐱬𐱭𐱮𐱯𐱰𐱱𐱲𐱳𐱴𐱵𐱶𐱷𐱸𐱹𐱺𐱻𐱼𐱽𐱾𐱿𐲀𐲁𐲂𐲃𐲄𐲅𐲆𐲇𐲈𐲉𐲊𐲋𐲌𐲍𐲎𐲏𐲐𐲑𐲒𐲓𐲔𐲕𐲖𐲗𐲘𐲙𐲚𐲛𐲜𐲝𐲞𐲟𐲠𐲡𐲢𐲣𐲤𐲥𐲦𐲧𐲨𐲩𐲪𐲫𐲬𐲭𐲮𐲯𐲰𐲱𐲲𐲳𐲴𐲵𐲶𐲷𐲸𐲹𐲺𐲻𐲼𐲽𐲾𐲿𐳀𐳁𐳂𐳃𐳄𐳅𐳆𐳇𐳈𐳉𐳊𐳋𐳌𐳍𐳎𐳏𐳐𐳑𐳒𐳓𐳔𐳕𐳖𐳗𐳘𐳙𐳚𐳛𐳜𐳝𐳞𐳟𐳠𐳡𐳢𐳣𐳤𐳥𐳦𐳧𐳨𐳩𐳪𐳫𐳬𐳭𐳮𐳯𐳰𐳱𐳲𐳳𐳴𐳵𐳶𐳷𐳸𐳹𐳺𐳻𐳼𐳽𐳾𐳿𐴀𐴁𐴂𐴃𐴄𐴅𐴆𐴇𐴈𐴉𐴊𐴋𐴌𐴍𐴎𐴏𐴐𐴑𐴒𐴓𐴔𐴕𐴖𐴗𐴘𐴙𐴚𐴛𐴜𐴝𐴞𐴟𐴠𐴡𐴢𐴣𐴤𐴥𐴦𐴧𐴨𐴩𐴪𐴫𐴬𐴭𐴮𐴯𐴰𐴱𐴲𐴳𐴴𐴵𐴶𐴷𐴸𐴹𐴺𐴻𐴼𐴽𐴾𐴿𐵀𐵁𐵂𐵃𐵄𐵅𐵆𐵇𐵈𐵉𐵊𐵋𐵌𐵍𐵎𐵏𐵐𐵑𐵒𐵓𐵔𐵕𐵖𐵗𐵘𐵙𐵚𐵛𐵜𐵝𐵞𐵟𐵠𐵡𐵢𐵣𐵤𐵥𐵦𐵧𐵨𐵩𐵪𐵫𐵬𐵭𐵮𐵯𐵰𐵱𐵲𐵳𐵴𐵵𐵶𐵷𐵸𐵹𐵺𐵻𐵼𐵽𐵾𐵿𐶀𐶁𐶂𐶃𐶄𐶅𐶆𐶇𐶈𐶉𐶊𐶋𐶌𐶍𐶎𐶏𐶐𐶑𐶒𐶓𐶔𐶕𐶖𐶗𐶘𐶙𐶚𐶛𐶜𐶝𐶞𐶟𐶠𐶡𐶢𐶣𐶤𐶥𐶦𐶧𐶨𐶩𐶪𐶫𐶬𐶭𐶮𐶯𐶰𐶱𐶲𐶳𐶴𐶵𐶶𐶷𐶸𐶹𐶺𐶻𐶼𐶽𐶾𐶿𐷀𐷁𐷂𐷃𐷄𐷅𐷆𐷇𐷈𐷉𐷊𐷋𐷌𐷍𐷎𐷏𐷐𐷑𐷒𐷓𐷔𐷕𐷖𐷗𐷘𐷙𐷚𐷛𐷜𐷝𐷞𐷟𐷠𐷡𐷢𐷣𐷤𐷥𐷦𐷧𐷨𐷩𐷪𐷫𐷬𐷭𐷮𐷯𐷰𐷱𐷲𐷳𐷴𐷵𐷶𐷷𐷸𐷹𐷺𐷻𐷼𐷽𐷾𐷿𐸀𐸁𐸂𐸃𐸄𐸅𐸆𐸇𐸈𐸉𐸊𐸋𐸌𐸍𐸎𐸏𐸐𐸑𐸒𐸓𐸔𐸕𐸖𐸗𐸘𐸙𐸚𐸛𐸜𐸝𐸞𐸟𐸠𐸡𐸢𐸣𐸤𐸥𐸦𐸧𐸨𐸩𐸪𐸫𐸬𐸭𐸮𐸯𐸰𐸱𐸲𐸳𐸴𐸵𐸶𐸷𐸸𐸹𐸺𐸻𐸼𐸽𐸾𐸿𐹀𐹁𐹂𐹃𐹄𐹅𐹆𐹇𐹈𐹉𐹊𐹋𐹌𐹍𐹎𐹏𐹐𐹑𐹒𐹓𐹔𐹕𐹖𐹗𐹘𐹙𐹚𐹛𐹜𐹝𐹞𐹟𐹠𐹡𐹢𐹣𐹤𐹥𐹦𐹧𐹨𐹩𐹪𐹫𐹬𐹭𐹮𐹯𐹰𐹱𐹲𐹳𐹴𐹵𐹶𐹷𐹸𐹹𐹺𐹻𐹼𐹽𐹾𐹿𐺀𐺁𐺂𐺃𐺄𐺅𐺆𐺇𐺈𐺉𐺊𐺋𐺌𐺍𐺎𐺏𐺐𐺑𐺒𐺓𐺔𐺕𐺖𐺗𐺘𐺙𐺚𐺛𐺜𐺝𐺞𐺟𐺠𐺡𐺢𐺣𐺤𐺥𐺦𐺧𐺨𐺩𐺪𐺫𐺬𐺭𐺮𐺯𐺰𐺱𐺲𐺳𐺴𐺵𐺶𐺷𐺸𐺹𐺺𐺻𐺼𐺽𐺾𐺿𐻀𐻁𐻂𐻃𐻄𐻅𐻆𐻇𐻈𐻉𐻊𐻋𐻌𐻍𐻎𐻏𐻐𐻑𐻒𐻓𐻔𐻕𐻖𐻗𐻘𐻙𐻚𐻛𐻜𐻝𐻞𐻟𐻠𐻡𐻢𐻣𐻤𐻥𐻦𐻧𐻨𐻩𐻪𐻫𐻬𐻭𐻮𐻯𐻰𐻱𐻲𐻳𐻴𐻵𐻶𐻷𐻸𐻹𐻺𐻻𐻼𐻽𐻾𐻿𐼀𐼁𐼂𐼃𐼄𐼅𐼆𐼇𐼈𐼉𐼊𐼋𐼌𐼍𐼎𐼏𐼐𐼑𐼒𐼓𐼔𐼕𐼖𐼗𐼘𐼙𐼚𐼛𐼜𐼝𐼞𐼟𐼠𐼡𐼢𐼣𐼤𐼥𐼦𐼧𐼨𐼩𐼪𐼫𐼬𐼭𐼮𐼯𐼰𐼱𐼲𐼳𐼴𐼵𐼶𐼷𐼸𐼹𐼺𐼻𐼼𐼽𐼾𐼿𐽀𐽁𐽂𐽃𐽄𐽅𐽆𐽇𐽋𐽍𐽎𐽏𐽐𐽈𐽉𐽊𐽌𐽑𐽒𐽓𐽔𐽕𐽖𐽗𐽘𐽙𐽚𐽛𐽜𐽝𐽞𐽟𐽠𐽡𐽢𐽣𐽤𐽥𐽦𐽧𐽨𐽩𐽪𐽫𐽬𐽭𐽮𐽯𐽰𐽱𐽲𐽳𐽴𐽵𐽶𐽷𐽸𐽹𐽺𐽻𐽼𐽽𐽾𐽿𐾀𐾁𐾃𐾅𐾂𐾄𐾆𐾇𐾈𐾉𐾊𐾋𐾌𐾍𐾎𐾏𐾐𐾑𐾒𐾓𐾔𐾕𐾖𐾗𐾘𐾙𐾚𐾛𐾜𐾝𐾞𐾟𐾠

Line 80.—The last word of the sixteenth paragraph appears to read 𐎠𐎡𐎢𐎣𐎤𐎥𐎦𐎧𐎨𐎩𐎪𐎫𐎬𐎭𐎮𐎯𐎰𐎱𐎲𐎳𐎴𐎵𐎶𐎷𐎸𐎹𐎺𐎻𐎼𐎽𐎾𐎿𐏀𐏁𐏂𐏃𐏄𐏅𐏆𐏇𐏈𐏉𐏊𐏋𐏌𐏍𐏎𐏏𐏐𐏑𐏒𐏓𐏔𐏕𐏖𐏗𐏘𐏙𐏚𐏛𐏜𐏝𐏞𐏟𐏠𐏡𐏢𐏣𐏤𐏥𐏦𐏧𐏨𐏩𐏪𐏫𐏬𐏭𐏮𐏯𐏰𐏱𐏲𐏳𐏴𐏵𐏶𐏷𐏸𐏹𐏺𐏻𐏼𐏽𐏾𐏿𐐀𐐁𐐂𐐃𐐄𐐅𐐆𐐇𐐈𐐉𐐊𐐋𐐌𐐍𐐎𐐏𐐐𐐑𐐒𐐓𐐔𐐕𐐖𐐗𐐘𐐙𐐚𐐛𐐜𐐝𐐞𐐟𐐠𐐡𐐢𐐣𐐤𐐥𐐦𐐧𐐨𐐩𐐪𐐫𐐬𐐭𐐮𐐯𐐰𐐱𐐲𐐳𐐴𐐵𐐶𐐷𐐸𐐹𐐺𐐻𐐼𐐽𐐾𐐿𐑀𐑁𐑂𐑃𐑄𐑅𐑆𐑇𐑈𐑉𐑊𐑋𐑌𐑍𐑎𐑏𐑐𐑑𐑒𐑓𐑔𐑕𐑖𐑗𐑘𐑙𐑚𐑛𐑜𐑝𐑞𐑟𐑠𐑡𐑢𐑣𐑤𐑥𐑦𐑧𐑨𐑩𐑪𐑫𐑬𐑭𐑮𐑯𐑰𐑱𐑲𐑳𐑴𐑵𐑶𐑷𐑸𐑹𐑺𐑻𐑼𐑽𐑾𐑿𐒀𐒁𐒂𐒃𐒄𐒅𐒆𐒇𐒈𐒉𐒊𐒋𐒌𐒍𐒎𐒏𐒐𐒑𐒒𐒓𐒔𐒕𐒖𐒗𐒘𐒙𐒚𐒛𐒜𐒝𐒞𐒟𐒠𐒡𐒢𐒣𐒤𐒥𐒦𐒧𐒨𐒩𐒪𐒫𐒬𐒭𐒮𐒯𐒰𐒱𐒲𐒳𐒴𐒵𐒶𐒷𐒸𐒹𐒺𐒻𐒼𐒽𐒾𐒿𐓀𐓁𐓂𐓃𐓄𐓅𐓆𐓇𐓈𐓉𐓊𐓋𐓌𐓍𐓎𐓏𐓐𐓑𐓒𐓓𐓔𐓕𐓖𐓗𐓘𐓙𐓚𐓛𐓜𐓝𐓞𐓟𐓠𐓡𐓢𐓣𐓤𐓥𐓦𐓧𐓨𐓩𐓪𐓫𐓬𐓭𐓮𐓯𐓰𐓱𐓲𐓳𐓴𐓵𐓶𐓷𐓸𐓹𐓺𐓻𐓼𐓽𐓾𐓿𐔀𐔁𐔂𐔃𐔄𐔅𐔆𐔇𐔈𐔉𐔊𐔋𐔌𐔍𐔎𐔏𐔐𐔑𐔒𐔓𐔔𐔕𐔖𐔗𐔘𐔙𐔚𐔛𐔜𐔝𐔞𐔟𐔠𐔡𐔢𐔣𐔤𐔥𐔦𐔧𐔨𐔩𐔪𐔫𐔬𐔭𐔮𐔯𐔰𐔱𐔲𐔳𐔴𐔵𐔶𐔷𐔸𐔹𐔺𐔻𐔼𐔽𐔾𐔿𐕀𐕁𐕂𐕃𐕄𐕅𐕆𐕇𐕈𐕉𐕊𐕋𐕌𐕍𐕎𐕏𐕐𐕑𐕒𐕓𐕔𐕕𐕖𐕗𐕘𐕙𐕚𐕛𐕜𐕝𐕞𐕟𐕠𐕡𐕢𐕣𐕤𐕥𐕦𐕧𐕨𐕩𐕪𐕫𐕬𐕭𐕮𐕯𐕰𐕱𐕲𐕳𐕴𐕵𐕶𐕷𐕸𐕹𐕺𐕻𐕼𐕽𐕾𐕿𐖀𐖁𐖂𐖃𐖄𐖅𐖆𐖇𐖈𐖉𐖊𐖋𐖌𐖍𐖎𐖏𐖐𐖑𐖒𐖓𐖔𐖕𐖖𐖗𐖘𐖙𐖚𐖛𐖜𐖝𐖞𐖟𐖠𐖡𐖢𐖣𐖤𐖥𐖦𐖧𐖨𐖩𐖪𐖫𐖬𐖭𐖮𐖯𐖰𐖱𐖲𐖳𐖴𐖵𐖶𐖷𐖸𐖹𐖺𐖻𐖼𐖽𐖾𐖿𐗀𐗁𐗂𐗃𐗄𐗅𐗆𐗇𐗈𐗉𐗊𐗋𐗌𐗍𐗎𐗏𐗐𐗑𐗒𐗓𐗔𐗕𐗖𐗗𐗘𐗙𐗚𐗛𐗜𐗝𐗞𐗟𐗠𐗡𐗢𐗣𐗤𐗥𐗦𐗧𐗨𐗩𐗪𐗫𐗬𐗭𐗮𐗯𐗰𐗱𐗲𐗳𐗴𐗵𐗶𐗷𐗸𐗹𐗺𐗻𐗼𐗽𐗾𐗿𐘀𐘁𐘂𐘃𐘄𐘅𐘆𐘇𐘈𐘉𐘊𐘋𐘌𐘍𐘎𐘏𐘐𐘑𐘒𐘓𐘔𐘕𐘖𐘗𐘘𐘙𐘚𐘛𐘜𐘝𐘞𐘟𐘠𐘡𐘢𐘣𐘤𐘥𐘦𐘧𐘨𐘩𐘪𐘫𐘬𐘭𐘮𐘯𐘰𐘱𐘲𐘳𐘴𐘵𐘶𐘷𐘸𐘹𐘺𐘻𐘼𐘽𐘾𐘿𐙀𐙁𐙂𐙃𐙄𐙅𐙆𐙇𐙈𐙉𐙊𐙋𐙌𐙍𐙎𐙏𐙐𐙑𐙒𐙓𐙔𐙕𐙖𐙗𐙘𐙙𐙚𐙛𐙜𐙝𐙞𐙟𐙠𐙡𐙢𐙣𐙤𐙥𐙦𐙧𐙨𐙩𐙪𐙫𐙬𐙭𐙮𐙯𐙰𐙱𐙲𐙳𐙴𐙵𐙶𐙷𐙸𐙹𐙺𐙻𐙼𐙽𐙾𐙿𐚀𐚁𐚂𐚃𐚄𐚅𐚆𐚇𐚈𐚉𐚊𐚋𐚌𐚍𐚎𐚏𐚐𐚑𐚒𐚓𐚔𐚕𐚖𐚗𐚘𐚙𐚚𐚛𐚜𐚝𐚞𐚟𐚠𐚡𐚢𐚣𐚤𐚥𐚦𐚧𐚨𐚩𐚪𐚫𐚬𐚭𐚮𐚯𐚰𐚱𐚲𐚳𐚴𐚵𐚶𐚷𐚸𐚹𐚺𐚻𐚼𐚽𐚾𐚿𐛀𐛁𐛂𐛃𐛄𐛅𐛆𐛇𐛈𐛉𐛊𐛋𐛌𐛍𐛎𐛏𐛐𐛑𐛒𐛓𐛔𐛕𐛖𐛗𐛘𐛙𐛚𐛛𐛜𐛝𐛞𐛟𐛠𐛡𐛢𐛣𐛤𐛥𐛦𐛧𐛨𐛩𐛪𐛫𐛬𐛭𐛮𐛯𐛰𐛱𐛲𐛳𐛴𐛵𐛶𐛷𐛸𐛹𐛺𐛻𐛼𐛽𐛾𐛿𐜀𐜁𐜂𐜃𐜄𐜅𐜆𐜇𐜈𐜉𐜊𐜋𐜌𐜍𐜎𐜏𐜐𐜑𐜒𐜓𐜔𐜕𐜖𐜗𐜘𐜙𐜚𐜛𐜜𐜝𐜞𐜟𐜠𐜡𐜢𐜣𐜤𐜥𐜦𐜧𐜨𐜩𐜪𐜫𐜬𐜭𐜮𐜯𐜰𐜱𐜲𐜳𐜴𐜵𐜶𐜷𐜸𐜹𐜺𐜻𐜼𐜽𐜾𐜿𐝀𐝁𐝂𐝃𐝄𐝅𐝆𐝇𐝈𐝉𐝊𐝋𐝌𐝍𐝎𐝏𐝐𐝑𐝒𐝓𐝔𐝕𐝖𐝗𐝘𐝙𐝚𐝛𐝜𐝝𐝞𐝟𐝠𐝡𐝢𐝣𐝤𐝥𐝦𐝧𐝨𐝩𐝪𐝫𐝬𐝭𐝮𐝯𐝰𐝱𐝲𐝳𐝴𐝵𐝶𐝷𐝸𐝹𐝺𐝻𐝼𐝽𐝾𐝿𐞀𐞁𐞂𐞃𐞄𐞅𐞆𐞇𐞈𐞉𐞊𐞋𐞌𐞍𐞎𐞏𐞐𐞑𐞒𐞓𐞔𐞕𐞖𐞗𐞘𐞙𐞚𐞛𐞜𐞝𐞞𐞟𐞠𐞡𐞢𐞣𐞤𐞥𐞦𐞧𐞨𐞩𐞪𐞫𐞬𐞭𐞮𐞯𐞰𐞱𐞲𐞳𐞴𐞵𐞶𐞷𐞸𐞹𐞺𐞻𐞼𐞽𐞾𐞿𐟀𐟁𐟂𐟃𐟄𐟅𐟆𐟇𐟈𐟉𐟊𐟋𐟌𐟍𐟎𐟏𐟐𐟑𐟒𐟓𐟔𐟕𐟖𐟗𐟘𐟙𐟚𐟛𐟜𐟝𐟞𐟟𐟠𐟡𐟢𐟣𐟤𐟥𐟦𐟧𐟨𐟩𐟪𐟫𐟬𐟭𐟮𐟯𐟰𐟱𐟲𐟳𐟴𐟵𐟶𐟷𐟸𐟹𐟺𐟻𐟼𐟽𐟾𐟿𐠀𐠁𐠂𐠃𐠄𐠅𐠆𐠇𐠈𐠉𐠊𐠋𐠌𐠍𐠎𐠏𐠐𐠑𐠒𐠓𐠔𐠕𐠖𐠗𐠘𐠙𐠚𐠛𐠜𐠝𐠞𐠟𐠠𐠡𐠢𐠣𐠤𐠥𐠦𐠧𐠨𐠩𐠪𐠫𐠬𐠭𐠮𐠯𐠰𐠱𐠲𐠳𐠴𐠵𐠶𐠷𐠸𐠹𐠺𐠻𐠼𐠽𐠾𐠿𐡀𐡁𐡂𐡃𐡄𐡅𐡆𐡇𐡈𐡉𐡊𐡋𐡌𐡍𐡎𐡏𐡐𐡑𐡒𐡓𐡔𐡕𐡖𐡗𐡘𐡙𐡚𐡛𐡜𐡝𐡞𐡟𐡠𐡡𐡢𐡣𐡤𐡥𐡦𐡧𐡨𐡩𐡪𐡫𐡬𐡭𐡮𐡯𐡰𐡱𐡲𐡳𐡴𐡵𐡶𐡷𐡸𐡹𐡺𐡻𐡼𐡽𐡾𐡿𐢀𐢁𐢂𐢃𐢄𐢅𐢆𐢇𐢈𐢉𐢊𐢋𐢌𐢍𐢎𐢏𐢐𐢑𐢒𐢓𐢔𐢕𐢖𐢗𐢘𐢙𐢚𐢛𐢜𐢝𐢞𐢟𐢠𐢡𐢢𐢣𐢤𐢥𐢦𐢧𐢨𐢩𐢪𐢫𐢬𐢭𐢮𐢯𐢰𐢱𐢲𐢳𐢴𐢵𐢶𐢷𐢸𐢹𐢺𐢻𐢼𐢽𐢾𐢿𐣀𐣁𐣂𐣃𐣄𐣅𐣆𐣇𐣈𐣉𐣊𐣋𐣌𐣍𐣎𐣏𐣐𐣑𐣒𐣓𐣔𐣕𐣖𐣗𐣘𐣙𐣚𐣛𐣜𐣝𐣞𐣟𐣠𐣡𐣢𐣣𐣤𐣥𐣦𐣧𐣨𐣩𐣪𐣫𐣬𐣭𐣮𐣯𐣰𐣱𐣲𐣳𐣴𐣵𐣶𐣷𐣸𐣹𐣺𐣻𐣼𐣽𐣾𐣿𐤀𐤁𐤂𐤃𐤄𐤅𐤆𐤇𐤈𐤉𐤊𐤋𐤌𐤍𐤎𐤏𐤐𐤑𐤒𐤓𐤔𐤕𐤖𐤗𐤘𐤙𐤚𐤛𐤜𐤝𐤞𐤟𐤠𐤡𐤢𐤣𐤤𐤥𐤦𐤧𐤨𐤩𐤪𐤫𐤬𐤭𐤮𐤯𐤰𐤱𐤲𐤳𐤴𐤵𐤶𐤷𐤸𐤹𐤺𐤻𐤼𐤽𐤾𐤿𐥀𐥁𐥂𐥃𐥄𐥅𐥆𐥇𐥈𐥉𐥊𐥋𐥌𐥍𐥎𐥏𐥐𐥑𐥒𐥓𐥔𐥕𐥖𐥗𐥘𐥙𐥚𐥛𐥜𐥝𐥞𐥟𐥠𐥡𐥢𐥣𐥤𐥥𐥦𐥧𐥨𐥩𐥪𐥫𐥬𐥭𐥮𐥯𐥰𐥱𐥲𐥳𐥴𐥵𐥶𐥷𐥸𐥹𐥺𐥻𐥼𐥽𐥾𐥿𐦀𐦁𐦂𐦃𐦄𐦅𐦆𐦇𐦈𐦉𐦊𐦋𐦌𐦍𐦎𐦏𐦐𐦑𐦒𐦓𐦔𐦕𐦖𐦗𐦘𐦙𐦚𐦛𐦜𐦝𐦞𐦟𐦠𐦡𐦢𐦣𐦤𐦥𐦦𐦧𐦨𐦩𐦪𐦫𐦬𐦭𐦮𐦯𐦰𐦱𐦲𐦳𐦴𐦵𐦶𐦷𐦸𐦹𐦺𐦻𐦼𐦽𐦾𐦿𐧀𐧁𐧂𐧃𐧄𐧅𐧆𐧇𐧈𐧉𐧊𐧋𐧌𐧍𐧎𐧏𐧐𐧑𐧒𐧓𐧔𐧕𐧖𐧗𐧘𐧙𐧚𐧛𐧜𐧝𐧞𐧟𐧠𐧡𐧢𐧣𐧤𐧥𐧦𐧧𐧨𐧩𐧪𐧫𐧬𐧭𐧮𐧯𐧰𐧱𐧲𐧳𐧴𐧵𐧶𐧷𐧸𐧹𐧺𐧻𐧼𐧽𐧾𐧿𐨀𐨁𐨂𐨃𐨄𐨅𐨆𐨇𐨈𐨉𐨊𐨋𐨌𐨍𐨎𐨏𐨐𐨑𐨒𐨓𐨔𐨕𐨖𐨗𐨘𐨙𐨚𐨛𐨜𐨝𐨞𐨟𐨠𐨡𐨢𐨣𐨤𐨥𐨦𐨧𐨨𐨩𐨪𐨫𐨬𐨭𐨮𐨯𐨰𐨱𐨲𐨳𐨴𐨵𐨶𐨷𐨹𐨺𐨸𐨻𐨼𐨽𐨾𐨿𐩀𐩁𐩂𐩃𐩄𐩅𐩆𐩇𐩈𐩉𐩊𐩋𐩌𐩍𐩎𐩏𐩐𐩑𐩒𐩓𐩔𐩕𐩖𐩗𐩘𐩙𐩚𐩛𐩜𐩝𐩞𐩟𐩠𐩡𐩢𐩣𐩤𐩥𐩦𐩧𐩨𐩩𐩪𐩫𐩬𐩭𐩮𐩯𐩰𐩱𐩲𐩳𐩴𐩵𐩶𐩷𐩸𐩹𐩺𐩻𐩼𐩽𐩾𐩿𐪀𐪁𐪂𐪃𐪄𐪅𐪆𐪇𐪈𐪉𐪊𐪋𐪌𐪍𐪎𐪏𐪐𐪑𐪒𐪓𐪔𐪕𐪖𐪗𐪘𐪙𐪚𐪛𐪜𐪝𐪞𐪟𐪠𐪡𐪢𐪣𐪤𐪥𐪦𐪧𐪨𐪩𐪪𐪫𐪬𐪭𐪮𐪯𐪰𐪱𐪲𐪳𐪴𐪵𐪶𐪷𐪸𐪹𐪺𐪻𐪼𐪽𐪾𐪿𐫀𐫁𐫂𐫃𐫄𐫅𐫆𐫇𐫈𐫉𐫊𐫋𐫌𐫍𐫎𐫏𐫐𐫑𐫒𐫓𐫔𐫕𐫖𐫗𐫘𐫙𐫚𐫛𐫜𐫝𐫞𐫟𐫠𐫡𐫢𐫣𐫤𐫦𐫥𐫧𐫨𐫩𐫪𐫫𐫬𐫭𐫮𐫯𐫰𐫱𐫲𐫳𐫴𐫵𐫶𐫷𐫸𐫹𐫺𐫻𐫼𐫽𐫾𐫿𐬀𐬁𐬂𐬃𐬄𐬅𐬆𐬇𐬈𐬉𐬊𐬋𐬌𐬍𐬎𐬏𐬐𐬑𐬒𐬓𐬔𐬕𐬖𐬗𐬘𐬙𐬚𐬛𐬜𐬝𐬞𐬟𐬠𐬡𐬢𐬣𐬤𐬥𐬦𐬧𐬨𐬩𐬪𐬫𐬬𐬭𐬮𐬯𐬰𐬱𐬲𐬳𐬴𐬵𐬶𐬷𐬸𐬹𐬺𐬻𐬼𐬽𐬾𐬿𐭀𐭁𐭂𐭃𐭄𐭅𐭆𐭇𐭈𐭉𐭊𐭋𐭌𐭍𐭎𐭏𐭐𐭑𐭒𐭓𐭔𐭕𐭖𐭗𐭘𐭙𐭚𐭛𐭜𐭝𐭞𐭟𐭠𐭡𐭢𐭣𐭤𐭥𐭦𐭧𐭨𐭩𐭪𐭫𐭬𐭭𐭮𐭯𐭰𐭱𐭲𐭳𐭴𐭵𐭶𐭷𐭸𐭹𐭺𐭻𐭼𐭽𐭾𐭿𐮀𐮁𐮂𐮃𐮄𐮅𐮆𐮇𐮈𐮉𐮊𐮋𐮌𐮍𐮎𐮏𐮐𐮑𐮒𐮓𐮔𐮕𐮖𐮗𐮘𐮙𐮚𐮛𐮜𐮝𐮞𐮟𐮠𐮡𐮢𐮣𐮤𐮥𐮦𐮧𐮨𐮩𐮪𐮫𐮬𐮭𐮮𐮯𐮰𐮱𐮲𐮳𐮴𐮵𐮶𐮷𐮸𐮹𐮺𐮻𐮼𐮽𐮾𐮿𐯀𐯁𐯂𐯃𐯄𐯅𐯆𐯇𐯈𐯉𐯊𐯋𐯌𐯍𐯎𐯏𐯐𐯑𐯒𐯓𐯔𐯕𐯖𐯗𐯘𐯙𐯚𐯛𐯜𐯝𐯞𐯟𐯠𐯡𐯢𐯣𐯤𐯥𐯦𐯧𐯨𐯩𐯪𐯫𐯬𐯭𐯮𐯯𐯰𐯱𐯲𐯳𐯴𐯵𐯶𐯷𐯸𐯹𐯺𐯻𐯼𐯽𐯾𐯿𐰀𐰁𐰂𐰃𐰄𐰅𐰆𐰇𐰈𐰉𐰊𐰋𐰌𐰍𐰎𐰏𐰐𐰑𐰒𐰓𐰔𐰕𐰖𐰗𐰘𐰙𐰚𐰛𐰜𐰝𐰞𐰟𐰠𐰡𐰢𐰣𐰤𐰥𐰦𐰧𐰨𐰩𐰪𐰫𐰬𐰭𐰮𐰯𐰰𐰱𐰲𐰳𐰴𐰵𐰶𐰷𐰸𐰹𐰺𐰻𐰼𐰽𐰾𐰿𐱀𐱁𐱂𐱃𐱄𐱅𐱆𐱇𐱈𐱉𐱊𐱋𐱌𐱍𐱎𐱏𐱐𐱑𐱒𐱓𐱔𐱕𐱖𐱗𐱘𐱙𐱚𐱛𐱜𐱝𐱞𐱟𐱠𐱡𐱢𐱣𐱤𐱥𐱦𐱧𐱨𐱩𐱪𐱫𐱬𐱭𐱮𐱯𐱰𐱱𐱲𐱳𐱴𐱵𐱶𐱷𐱸𐱹𐱺𐱻𐱼𐱽𐱾𐱿𐲀𐲁𐲂𐲃𐲄𐲅𐲆𐲇𐲈𐲉𐲊𐲋𐲌𐲍𐲎𐲏𐲐𐲑𐲒𐲓𐲔𐲕𐲖𐲗𐲘𐲙𐲚𐲛𐲜𐲝𐲞𐲟𐲠𐲡𐲢𐲣𐲤𐲥𐲦𐲧𐲨𐲩𐲪𐲫𐲬𐲭𐲮𐲯𐲰𐲱𐲲𐲳𐲴𐲵𐲶𐲷𐲸𐲹𐲺𐲻𐲼𐲽𐲾𐲿𐳀𐳁𐳂𐳃𐳄𐳅𐳆𐳇𐳈𐳉𐳊𐳋𐳌𐳍𐳎𐳏𐳐𐳑𐳒𐳓𐳔𐳕𐳖𐳗𐳘𐳙𐳚𐳛𐳜𐳝𐳞𐳟𐳠𐳡𐳢𐳣𐳤𐳥𐳦𐳧𐳨𐳩𐳪𐳫𐳬𐳭𐳮𐳯𐳰𐳱𐳲𐳳𐳴𐳵𐳶𐳷𐳸𐳹𐳺𐳻𐳼𐳽𐳾𐳿𐴀𐴁𐴂𐴃𐴄𐴅𐴆𐴇𐴈𐴉𐴊𐴋𐴌𐴍𐴎𐴏𐴐𐴑𐴒𐴓𐴔𐴕𐴖𐴗𐴘𐴙𐴚𐴛𐴜𐴝𐴞𐴟𐴠𐴡𐴢𐴣𐴤𐴥𐴦𐴧𐴨𐴩𐴪𐴫𐴬𐴭𐴮𐴯𐴰𐴱𐴲𐴳𐴴𐴵𐴶𐴷𐴸𐴹𐴺𐴻𐴼𐴽𐴾𐴿𐵀𐵁𐵂𐵃𐵄𐵅𐵆𐵇𐵈𐵉𐵊𐵋𐵌𐵍𐵎𐵏𐵐𐵑𐵒𐵓𐵔𐵕𐵖𐵗𐵘𐵙𐵚𐵛𐵜𐵝𐵞𐵟𐵠𐵡𐵢𐵣𐵤𐵥𐵦𐵧𐵨𐵩𐵪𐵫𐵬𐵭𐵮𐵯𐵰𐵱𐵲𐵳𐵴𐵵𐵶𐵷𐵸𐵹𐵺𐵻𐵼𐵽𐵾𐵿𐶀𐶁𐶂𐶃𐶄𐶅𐶆𐶇𐶈𐶉𐶊𐶋𐶌𐶍𐶎𐶏𐶐𐶑𐶒𐶓𐶔𐶕𐶖𐶗𐶘𐶙𐶚𐶛𐶜𐶝𐶞𐶟𐶠𐶡𐶢𐶣𐶤𐶥𐶦𐶧𐶨𐶩𐶪𐶫𐶬𐶭𐶮𐶯𐶰𐶱𐶲𐶳𐶴𐶵𐶶𐶷𐶸𐶹𐶺𐶻𐶼𐶽𐶾𐶿𐷀𐷁𐷂𐷃𐷄𐷅𐷆𐷇𐷈𐷉𐷊𐷋𐷌𐷍𐷎𐷏𐷐𐷑𐷒𐷓𐷔𐷕𐷖𐷗𐷘𐷙𐷚𐷛𐷜𐷝𐷞𐷟𐷠𐷡𐷢𐷣𐷤𐷥𐷦𐷧𐷨𐷩𐷪𐷫𐷬𐷭𐷮𐷯𐷰𐷱𐷲𐷳𐷴𐷵𐷶𐷷𐷸𐷹𐷺𐷻𐷼𐷽𐷾𐷿𐸀𐸁𐸂𐸃𐸄𐸅𐸆𐸇𐸈𐸉𐸊𐸋𐸌𐸍𐸎𐸏𐸐𐸑𐸒𐸓𐸔𐸕𐸖𐸗𐸘𐸙𐸚𐸛𐸜𐸝𐸞𐸟𐸠𐸡𐸢𐸣𐸤𐸥𐸦𐸧𐸨𐸩𐸪𐸫𐸬𐸭𐸮𐸯𐸰𐸱𐸲𐸳𐸴𐸵𐸶𐸷𐸸𐸹𐸺𐸻𐸼𐸽𐸾𐸿𐹀𐹁𐹂𐹃𐹄𐹅𐹆𐹇𐹈𐹉𐹊𐹋𐹌𐹍𐹎𐹏𐹐𐹑𐹒𐹓𐹔𐹕𐹖𐹗𐹘𐹙𐹚𐹛𐹜𐹝𐹞𐹟𐹠𐹡𐹢𐹣𐹤𐹥𐹦𐹧𐹨𐹩𐹪𐹫𐹬𐹭𐹮𐹯𐹰𐹱𐹲𐹳𐹴𐹵𐹶𐹷𐹸𐹹𐹺𐹻𐹼𐹽𐹾𐹿𐺀𐺁𐺂𐺃𐺄𐺅𐺆𐺇𐺈𐺉𐺊𐺋𐺌𐺍𐺎𐺏𐺐𐺑𐺒𐺓𐺔𐺕𐺖𐺗𐺘𐺙𐺚𐺛𐺜𐺝𐺞𐺟𐺠𐺡𐺢𐺣𐺤𐺥𐺦𐺧𐺨𐺩𐺪𐺫𐺬𐺭𐺮𐺯𐺰𐺱𐺲𐺳𐺴𐺵𐺶𐺷𐺸𐺹𐺺𐺻𐺼𐺽𐺾𐺿𐻀𐻁𐻂𐻃𐻄𐻅𐻆𐻇𐻈𐻉𐻊𐻋𐻌𐻍𐻎𐻏𐻐𐻑𐻒𐻓𐻔𐻕𐻖𐻗𐻘𐻙𐻚𐻛𐻜𐻝𐻞𐻟𐻠𐻡𐻢𐻣𐻤𐻥𐻦𐻧𐻨𐻩𐻪𐻫𐻬𐻭𐻮𐻯𐻰𐻱𐻲𐻳𐻴𐻵𐻶𐻷𐻸𐻹𐻺𐻻𐻼𐻽𐻾𐻿𐼀𐼁𐼂𐼃𐼄𐼅𐼆𐼇𐼈𐼉𐼊𐼋𐼌𐼍𐼎𐼏𐼐𐼑𐼒𐼓𐼔𐼕𐼖𐼗𐼘𐼙𐼚𐼛𐼜𐼝𐼞𐼟𐼠𐼡𐼢𐼣𐼤𐼥𐼦𐼧𐼨𐼩𐼪𐼫𐼬𐼭𐼮𐼯𐼰𐼱𐼲𐼳𐼴𐼵𐼶𐼷𐼸𐼹𐼺𐼻𐼼𐼽𐼾𐼿𐽀𐽁𐽂𐽃𐽄𐽅𐽆𐽇𐽋𐽍𐽎𐽏𐽐𐽈𐽉𐽊𐽌𐽑𐽒𐽓𐽔𐽕𐽖𐽗𐽘𐽙𐽚𐽛𐽜𐽝𐽞𐽟𐽠𐽡𐽢𐽣𐽤𐽥𐽦𐽧𐽨𐽩𐽪𐽫𐽬𐽭𐽮𐽯𐽰𐽱𐽲𐽳𐽴𐽵𐽶𐽷𐽸𐽹𐽺𐽻𐽼𐽽𐽾𐽿𐾀𐾁𐾃𐾅𐾂𐾄𐾆𐾇𐾈𐾉𐾊𐾋𐾌𐾍𐾎𐾏𐾐𐾑𐾒𐾓𐾔𐾕𐾖

⁸³ *adakiya imiya martiyá hamatakhshatá anushiýá man* ⁸³ *á*;
 soli hi lumines moliti sunt in ministerio meo;

Vidafraná náma Vayaspárahýá putra Pársa; 'Utána
Intaphernes nominatus Veisparis filius Persicus Otanes

náma Thukhrahýá ⁸⁴ *putra Pársa: Gaubaruwa náma*
nominatus Socris filius Persicus Gobryas nominatus

Marduniyahýá putra Pársa; Vidarna náma Ba ⁸⁵ *gábíg-*
Mardonio filius Persicus. Hydarnes nominatus Mega-

nahýá putra Pársa; Bagabukhsha náma Dáduhyahýá putra
bignis filius Persius; Megabyzus nominatus Dadöis filius

Pársa: ⁸⁶ *Ardumanish náma Vahukahýá putra Pársa.*
Persicus: Ardomanes nominatur Vaccis filius Persicus.

In the third clause which commences this restored portion of the eighteenth paragraph, *hamatakhshatá* is a valuable correction, for it shows that the following word *anushiýá* must be a noun in the ablative case, signifying "in the service," rather than the nom. plur. of an adjective, as I have hitherto supposed. The names of the conspirators are also especially valuable, not merely for their own historical interest, but for the aid which they orthographically afford, through a comparison with their Median and Babylonian correspondents, in determining the power of many characters of those alphabets.

As we have now a genuine and complete list of the Chiefs who confederated with Darius against the Magian, it may be of interest to append to the different names, such notices as the Greeks have left us, both of the individuals and of their families.

I. *Vidafraná*, or, as he is named in the Median copy, *Vindaparna*, is called by Herodotus, Ἰνταφέρνης or Ἰνταφρένης¹. As he is placed at the head of the Cuneiform list, he may be regarded as the chief of the conspirators, and if we compare this indication with the story told of Intaphernes by Herodotus, it at once occurs to us that it must have been owing to his recognized superiority of rank, that he was pushed forward by his colleagues, after the accession of Darius, to assert the privileges of their order, and that he thus fell a victim to his temerity². It may be doubted, however, if this catastrophe could have happened as early in the reign of Darius as it is placed by

¹ Herod. lib. iii. c. 70.

² Lib. iii. c. 118, 119.

Herodotus; for if Intaphernes had already suffered an ignominious death when the Behistun Sculptures were engraved, his name would hardly have been admitted into the honorary tablet. It may be remembered, also, that Intaphernes and Otanes are especially associated by Herodotus in the organization and execution of the plot against the Magian; and it is interesting, therefore, to find that the two names follow each other in the present list. Neither is the father of Intaphernes, I believe, nor his son, who would probably have borne the same name, mentioned in history, and we are thus without any clue to the Greek orthography of *Vayaspára*. In Median, however, the name is written *Vispari*, and in Babylonian *Husbara*. Ctesias, with his usual carelessness, names Intaphernes, Ἀταφέρνης. I shall explain in the Vocabulary the word *franá* or φέρνης, which enters into the composition of so many Persian names handed down to us by the Greeks.

II. *Otanes*. This chief would appear from Herodotus to have been the prime mover in the conspiracy against the Magian. He is stated to have been the first who discovered the imposture, through the instrumentality of his daughter, Phædyma, and the first who counselled opposition¹. He was also undoubtedly of the highest rank among the nobles of Persia, being allied with the line of Cyrus, and with the royal family of Cappadocia. The Greeks have confounded, in a most singular manner between Otanes the father, and Onophas or Anaphes the son. Herodotus is so far correct, that he has named the arch-conspirator Otanes, and that he has also preserved a notice of the son Anaphes, in designating the leader of the Cissian contingent under Xerxes²; yet, he has certainly in several instances misapplied the names. Otanes, for instance, who was old enough to have married his daughter Phædyma to Cambyses³, about B.C. 526, and who commanded in the Samian war⁴ about B.C. 518, could not by possibility have led the Persians, the flower of the army of Xerxes, in the Grecian expedition of B.C. 480⁵. When Herodotus, therefore, speaks of the Persian general, Otanes, at this period, we may be pretty sure that he means the son Anaphes; the more so indeed, as he also calls this Otanes the father of Amestris, the wife of Xerxes⁶, while we know the

¹ Herod. lib. iii. c. 68 to 70.

² Lib. vii. c. 62.

³ Lib. iii. c. 68.

⁴ Lib. iii. c. 141

⁵ There is also an Otanes, married to a daughter of Darius, who commanded in the war against Ionia and Æolia, in B.C. 497, and took Clazomenæ and Cyme; but this is neither the conspirator, nor the leader of the Persian contingent.

⁶ Herod. lib. vii. c. 61.

true father of that lady to have been Otanes's son Anaphes. If, however, Herodotus made one error in designating the Persian commander as Otanes, he must have fallen into another in naming the the Cissian general Anaphes. My own idea is, that there were: firstly, the fellow conspirator of Darius, Otanes, son of Socres (and not of Pharnaspes as Herodotus tells us), who gave his daughter Phædyma successively to Cambyzes, to the Magian, and to Darius; secondly, the son, Onophas or Anaphes, in great favour with Xerxes, who married his daughter Amestris, and who gave him the command of the Persians in the Greek war; and thirdly, a son of Anaphes, named Otanes like his grandfather, who also served in the Greek war, in command of the Cissian Contingent. Anaphes, the son of Otanes, appears to have been the most celebrated of the family, and thus Ctesias, who correctly describes this chief as the father of the famous Amestris, and who also mentions him in the Greek war, (giving him however a naval instead of a military command,) has been led into the error of confounding him with his father Otanes, *Ονόφας* being placed by the Greek physician at the head of the list of conspirators. Another curious circumstance is, that Diodorus Siculus, in detailing the genealogy of the Cappadocian kings, brings down the line of descent from Pharnaces, who married Atossa, sister of Cambyzes, the great grandfather of Cyrus the Great, through four generations to Anaphas, whom he specially designates as one of the seven, evidently meaning Otanes¹. We have fortunately the Median and Babylonian forms both of Otanes and Socres. The Median orthographies are *Huttāna* and *Dukkara*, the Babylonian *Hvattan'a* and *Sukr'a*.

III. *Gobryas*, named by Herodotus *Γωβρυης*, and by him associated with Megabyzos in the conspiracy against the Magian. The line of Gobryas furnishes another example of the tendency of the old Persians, like the Greeks and Indians, to perpetuate their family names in an alternate series. The Mardonius of the inscriptions is the father of Gobryas: the Mardonius of history is his son². Of the former, Herodotus has preserved no notice; but the latter, the well-known Commander-in-chief of the army of Xerxes, who fell gallantly fighting at Platæa, has ever been admired as one of the finest specimens of the true Persian chivalry³. The family of Gobryas was very closely allied with that of Darius. While Darius was yet a noble in the Court of Cambyzes he married the daughter of Gobryas⁴, and

¹ Phot. Bib. p. 1158.

² Herod. lib. vii. c. 82.

³ Herod. lib. ix. c. 62, 63.

⁴ Lib. vii. c. 2.

gave to that chief his own sister¹. The children of the former marriage, owing to the hostility of their half-brother, Xerxes, were never permitted to rise to eminence; but the issue of the other marriage was the famous Mardonius, who further strengthened the family interests by wedding Artazostra, a daughter of his uncle Darius². Gobryas is mentioned in the Inscriptions to have been employed by Darius in quelling an insurrection in Susiana, and it is just possible that the noble of the name of *Gubaruwa*, and of the Patischonian tribe, who officiated as bow-bearer to Darius, and whose effigy is figured on the rock at Nakhsh-i-Rustam, may be the same individual. In Greek history we hear nothing of Gobryas after the expedition into Scythia, the abandonment of which was mainly owing to his judicious counsel³. We have the Median forms at Behistun of *Gubaruwa* and *Marduniya*; but the Babylonian correspondents of both the names are unfortunately lost⁴.

IV. The *Vidarna* of the Inscriptions is of course the Ὑδάρνης of Herodotus, and Ἰδέρνης of Ctesias. In Median, the orthography would be *Vindarna* or *Vintarna*, which explains the Ἰνδάρνης of Plutarch. Hydarnes is hardly known, I think, in history during the reign of Darius, except as having participated in the plots against the Magian; but under that of Xerxes, he is noticed by Herodotus, as having been placed in command of the entire Asiatic coast⁵; and he would seem in this position to have enjoyed great influence; for of his two sons, the elder, Hydarnes, was selected for the command of the Immortals, the most honourable post probably in the Persian army⁶, and the younger, Sisamnes, led the Arians in the Greek campaign⁷. From the same Hydarnes also, according to Strabo, were descended the kings of Armenia, who reigned from the time of Darius to that of Antiochus the Great⁸. There is no mention among the Greeks of the father of Hydarnes, but the name (which is written in Persian *Bagabigna*, and in Median *Bakabikna*,) would have been, no doubt, transformed by them into Μεγαβίγνης, as *Bogabukhsha* became Μεγαβυζος.

¹ Herod. lib. vii. c. 5.

² Lib. vi. c. 43.

³ Lib. iv. c. 132, 134.

⁴ Ctesias, whose great object it was to differ with Herodotus, named the fellow conspirator of Darius, Μαρδόνιος instead of Γωβρύης, confounding the father and son, as in the case of Otanes and Anaphes. In speaking also of the favour which Mardonius enjoyed at the Court of Xerxes before the Grecian expedition was set on foot, he calls him Μαρδόνιος ὁ παλαιός, as if he really supposed him to be the same noble who helped to slay the Magian thirty-six years previously.

⁵ Herod. lib. vii. c. 35.

⁶ Ib. c. 83.

⁷ Ib. c. 65.

⁸ Strabo, Oxf. Edit. p. 771. The last king of the line was Orontes, who was dispossessed by Artaxius and Zadriadris.

The termination is the same as occurs in the name of 'Αρραβίτης, but I am not sure of the etymology. I have not been able to recover a trace of the Babylonian forms, either of Hydarnes or Megabignes, and of the Median rendering of the former name, I have only the ending in *tarna* or *darna*.

V. *Megabyzus*. There has been fully as much confusion among the Greeks between Megabyzus and Zopyrus, as I have already noticed between Otanes and Onophas. Herodotus is the only author who has preserved the name of Megabyzus among the seven conspirators. Justin in the place of Megabyzus names Zopyrus, the hero of the Babylonian stratagem, whom Herodotus states to have been the son of Megabyzus; while Ctesias admits neither one nor the other among the illustrious seven; but for Megabyzus and his colleague Ardomanes, substitutes the obscure names of Νοροδαβάρης and Βαρίης. Herodotus again, we may, I think, on the authority of the Inscriptions, convict of error, in his account of the siege of Babylon, and his description of its capture through the self-mutilation of Zopyrus'. Babylon revolted twice during the reign of Darius, and twice surrendered without risking a siege. There seems, it is true, to have been a third revolt in the reign of Xerxes, in which Zopyrus, son of Megabyzus the conspirator, who was at the time governor of the city, was slain, and which led to the place being attacked and taken by a second Megabyzus, son of the murdered governor; and it is possible the account of Ctesias may be true, that it was during this third siege that a successful stratagem was practised against the place. I am, I confess, however, very sceptical as to the story of the self-mutilation of the Persian general. The narrative bears, I think, the impress of fable, and is moreover placed completely within the pale of romance by the statement of Polyænus, that it was copied from a stratagem practised by a certain Sacan, beyond the Oxus, with a view of destroying the army of Darius; the said stratagem, in all the minutest features, from the opening self-devotion of the patriot chief to the ultimate miraculous salvation of a remnant of the doomed army, being a standard Oriental story, applied in different ages by the Persian bards and traditionists to Firuz and the Hiyáthelah, by Abu Rihán to Kanishka and the Indians, and by the historians of Cashmeer to their famous king, Lalitáditya. Megabyzus, at any rate, could not have undergone the terrible mutilation ascribed by Herodotus to Zopyrus, for he subsequently married the daughter of Xerxes, and

became one of the first men in the kingdom. This Megabyzus had also a son named Zopyrus, who revolted against the Persians, and took service with the Athenians.

Although there is thus evidence that for four generations the line of Megabyzus followed the usage of alternating the family names, I cannot venture to identify with Zopyrus the title of the conspirator's father, which is *Dáduhya* in Persian; *Dátduviya* in Median; and, *Zat'u'a* in Babylonian. I would give the genealogy as follows:—

1. Dádúhya, the same name as دادویه, which is not uncommon in old Persian.
2. Megabyzus; the conspirator, otherwise unknown.
3. Zopyrus, Governor of Babylon, slain by the inhabitants in a revolt.
4. Megabyzus avenged his father's death on Babylon; married Amytis, the daughter of Xerxes; was appointed one of the superior generals of the Persian army in the Greek campaign, continued in favour under Artaxerxes; drove Inarus and the Greeks out of Egypt; revolted against Artaxerxes; was reconciled with the king, and died in an honourable old age in Persia.
5. Zopyrus after the death of his father and mother fled to Athens, and lost his life at Caunus¹.

VI. *Ardomanes*. Greek authors mention neither this chief, whose name is written in Persian *Arđumanish*, and in Babylonian *Harđumanis*; nor his father, whose name is *Vahuka* in Persian; *Vaukku* in Median; and *Huvakka* (?) in Babylonian. Herodotus has *Aspathines* for the sixth conspirator, having been led into error apparently by the confidential position which *Aspathana* enjoyed as quiver-bearer to the king, according to the brief legend at Nakhsh-i-Rustam, which records his name and office. but it is impossible to account for the name *Barises*, which Ctesias has substituted for *Ardomanes*. The etymology of all these names will be examined in the Vocabulary.

Line 86.—The nineteenth paragraph thus commences:—

۱ ۱۲ ۳۴ ۵۶ ۷۸ ۹۰ ۱۱ ۱۲ ۱۳ ۱۴ ۱۵ ۱۶ ۱۷
 ۱۸ ۱۹ ۲۰ ۲۱ ۲۲ ۲۳ ۲۴ ۲۵ ۲۶ ۲۷ ۲۸

[illegible]

¹ For notices of Megabyzus and Zopyrus, see Herod. lib. vii. c. 82, and lib. iii. c. 160, and Ctesias, *passim*. The Μεγάβζος or Μεγάβαζος left in command in Europe after Darius had returned from Scythia, was a different person altogether.

1

[illegible]

1. *Gubaruwa Pátish'uwarish Dárayawahush khs*
Gobryas Patischorensis Darii

“Gobryas the Patischorian, bow-bearer of K hardly believe this Gobryas to be Darius’s fellow the Magian; he rather seems to have been a common monarch, although his Persian nationality (*Pati* representing the *Παρισηοφεις*, who are mentioned tribes of Persis¹), is perhaps in favour of the other *sharastibara* must signify “a bow-bearer,” is re-

c 2

NOTE ON THE

finding the king's other attendant named his "quiver-bearer;" we have a suitable etymology for *sharasti*, "a bow," in शरः "bow," and *asti*, "throwing," from अस्तु "to throw."

above the head of a figure immediately below the












[illegible]

nyawahush khsháyathiyahyā isiwám dásya-
Darii regis sagittarum custos

have no doubt, the same name as the Aspathines of
 was very possibly owing to the confidential situation
 he Greek historian was led to confound him with
 manes. There cannot of course, be any question
 of *isuwám dásyamá*; *isuwám* as the gen. plur. of
 is pure Sanscrit, and *dásyamá* is an analogous
 servant," being formed with a suffix of attribution
 or दास्य "to give."

are supporting the platform or throne.

m Ma ch i y á

asi hi) Masii.

tachiya being in the plural number, I suppose the line of fifteen captive figures who support

